

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bob Kellogg <ae4ic@nr.infi.net>
Subject: [11782] 1 Question survey
Message-ID: <199702121615.LAA25562@mh004.infi.net>

Gang,

1. What are the brands and model nos. of the tuners you use?

(If you want to tell me about your HB tuner, that's good info also)

I've received a lot of replies from the original surveys, but would like more to be sure the results are representative of the group. So I'm repeating the question with a different title, hoping to snag some of you who have a quick delete button.

In the meantime, I'm testing a Murch 2000A tuner. (this is the popular "Ultimate Transmatch" circuit from the 1980s) Hopefully, the results will be published next week, along with the survey results.

Many thanks to those who have already replied.

CUL,

Bob Kellogg, AE4IC, Greensboro, NC
Probably, but not necessarily. - Benny Hill

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: john andrews <jm165723@eee.org>
Subject: [11741] 100-0-100 uA meters:usage?
Message-ID: <330148C2.5E5@eee.org>

Hi Gang:

Pawing thru the junk box and pulling parts for my next shack
Mega-Parts super sale and found a new 100-0-100uA meter.

Anyone used this as a null indicator in a dip-meter? Seems the reason most dip-meters don't use it is due to the cost(?)... Anyone ever try it?

BTW- Still looking for info on a HP 1607a scope.....help?

Thanks, John-N5INZ

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: AD4KB@aol.com
Subject: [11822] 30 meter converter
Message-ID: <970212172543_-1442038924@emout03.mail.aol.com>

Does anyone have a schematic for a converter for 30 meters? I would like to build one that outputs on the 40 meter band, to use my HR1680 receiver. I also might be interested in a kit for this project if you know of any. By the way, I haven't received the digest version of the QRP list for 2 or 3 days. Did my subscription expire?

Jim

(AD4KB@aol.com)

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "David Kreinberg" <kreinbd@ccgate.dl.nec.com>
Subject: [11765] 38S - I'M STUMPED
Message-ID: <9701128557.AA855763293@smtpgw.ccgate.dl.nec.com>

Well, this will be the last of my rantings for a while (I promise). Here's the latest:

I've now replaced every major component in the tuning circuit and still have the limited tuning range. I've replaced P2, D3, U1, even rewound T1. Still same old stuff. Maybe a hair-line short/open somewhere? Here's where a scope would be of major help.

I'll have to shelf it for now. Have spent mucho time on it. It's a shame, I was trying to get this done for my son's show and tell at school. Doesn't look like that's going to happen.

Thanks again for everyone's help. I envy you all who have 38S on the air!

See you on FSFD from Texas tonight.

73 de Dave NR3E
nr Dallas, TX
qrp-1 #25, ARRL

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "David Kreinberg" <kreinbd@ccgate.dl.nec.com>
Subject: [11828] 38S 22.1184MHz XTAL
Message-ID: <9701128557.AA855796142@smtpgw.ccgate.dl.nec.com>

Gang:

It's been suggested that I look at the 22.1184MHz
xtal as the cause of my 38S tuning whoas.

Should I get the one marked "series" or the one
marked "20pF" under the load capacitance column
in the Mouser catalog.

Sure hope this is the bad critter causing me
distress!

Thanks, all.

73 de Dave NR3E
nr Dallas, TX
qrp-1 #25, ARRL

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Bradley S. Mitchell" <bmitchel@kodak.com>
Subject: [11774] 38S thumping Continued
Message-ID: <3302AE19.3315@kodak.com>

As Dave has stated , it appears that the
thumper is inherant with the 4066. I started re-thinking the
whole problem.

What we have control over are the inputs ,
controls, outputs, and the supply.

Now, we've been fiddling with the inputs,
outputs, and controls, what's left?

Supply. hmm . let me think here. we're switching
very low level signals around the 4066 switch,
and the rail is 8v. hmmm, can we reduce the thump, by
reducing the rail on the switch?

Just a thought, but do we really need 8V swing to
get the signals through the switch? But then the control signals
would have to be modified for level..

Just some thoughts that were wandering in my mind. I really
don't have much experience with these 4066's ,but am curious
about the effects of the large swing to control the small signal.

73 Brad WB8GGG

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "J.B. Fox" <w5hir@mail.phoenix.net>
Subject: [11762] AT-11 auto-tuner
Message-ID: <199702121214.GAA29870@mail.phoenix.net>

I would personally like to thank Scott Rosenfeld for an excellent group
buy for the AT-11 auto-tuner. For those persons who did not purchase
the enclosure.. well....after looking at the nice job and the "complexity"
of the panel etc, I'm glad I spent the extra thirty bucks.

Thanks again Scott for your tremendous effort..Well done!!

J. B. "foxy" Fox w5hir@mail.phoenix.net

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Mike Robinson <miker@cc.com>
Subject: [11781] AT-11 QRP
Message-ID: <9702121604.AA09861@voder.nsc.com>

If you'd like to see the finished AT-11 QRP
in the enclosure:

<http://www.frii.com/~michael/amateur.html>

Yes that is a 3.5" floppy sitting on top of it.

=====

7.3 de Michael N7MR	miker@cc.com	michael@frii.com
http://www.frii.com/~michael		
QRP-L #126	Norcal #857	CQC #180

=====

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Marcus Leatham" <leatham@nortel.ca>
Subject: [11786] AT-11 Rcvd
Message-ID: <199702121637.LAA75838@nss2.CC.Lehigh.EDU>

Thanks, Scott, for arranging the group buy.
My QRP and QRO kits are here and in good condx.

My thoughts on assembly so far:

I'm about halfway done with the QRO board.

The leads on D20 1N4001 are too big for the holes.
I used old resistor leads to solder into the holes, then
soldered the resistor leads to D20.

The assembly manual says to wind the toroids first,
but I'm not going to wind them until time to put them
onto the board (almost last), so they don't lay around
on the bench and get all badgered up.

Marcus, KR5N

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: n2beg@juno.com (Douglas E. Stewart)
Subject: [11729] Badgers!! on discovery channel, NOW 0134Z
Message-ID: <19970211.203943.16374.0.n2beg@juno.com>

Check it out, quick These guys are eating dung beetles, Mmmmmm
73z, Doug, N2BEG qrp-l # 850, etc...

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Brent Alexenko <alexenko@prairie.nodak.edu>
Subject: [11802] Can you hear me?

Message-ID: <Pine.OSF.3.91.970212133253.18871A-100000@prairie.nodak.edu>

Well, after much tinkering and a quick trip back to Wilderness Radio (7 days total time), my Sierra is operational!

I've been listening a lot and trying to respond to whoever's out there, but I'm a little concerned about my antenna efficiency. I've "borrowed" a friend's 40m Hamstick dipole, and so far, no contacts at all. It's propped up in the middle of my living room, since I want to make sure the silly thing works before I start drilling holes in my walls.

Has anyone else tried this? What's a "good" antenna for limited space. Is running a wire around the edge of the room even something to consider. I had the 'sticks on the floor and the SWR went through the roof.

I know there are no miracles, I just want something that will do more than heat the air around the wires. I'm only on 40m now, but that will soon change, and I'm going to pick up a tuner this weekend. Is a dipole run around the edge of the room something that will mostly work?

Hopefully I'll find something that will get me out until all the snow melts. As soon as I'm up and running, I'd love to help with WAS North Dakota.

Here we go....

Thanks,

Brent
KG0WE
West Fargo, ND

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Steve Hurst" <shurst@magiclink.com>
Subject: [11744] Cap. markings.. HELP !!
Message-ID: <199702120608.BAA34943@nss2.CC.Lehigh.EDU>

Gang,

I know that it has been posted before, but I'm just too tired to look for it ! Besides I want a quick answer from some kind soul :-) ! I rx'ed my 38 spl. last Friday, great kit , and its coming along nicely ! BUT, I was missing a cap. part number C-16 or C-23, the 22pF disc cap. Only rx'ed one of these babies with my kit. I know , Norcal will send me one if I ask, but you see , I have a lot of caps in my "junk" box. Only problem is , they have that crazy code on them that you have to belong to some club to figure

out what they are ! So any club members out there who can "decode" these for me ? I have gone through and picked out what I think will work , so here are the numbers as they appear on the caps.....

20K
NPO
50V

and

6.8K
N 750

and last

24 J
NPO

Any of these look like they will fill the bill for the 22pF, C-23 ??????
Thank you very much for your time and effort !!!!!!!!!!!!!!!

73,
Steve Hurst
KA7NOC
di dit

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: clifton w sikes <csikes@brightok.net>
Subject: [11727] CMOS 111 for negative keying.....HELP
Message-ID: <199702120113.TAA04395@sooner.brightok.net>

My big mouth got me in over my head, again. I volunteered to build a CMOS 111 for my buddy Bill. I said sure, I've done that. Today he told me he wants to use it with his FT-101 b. Woagh. What I know about tubes will fit inside a 6L6. Has anyone done the mod for negative keying? Are there any traps to fall into? The circuit in the instructions looks simple enough. Does it work? Thanks for any help you all might give me.

Clifton Sikes

AB5UA
Earlsboro,Ok.

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: clifton w sikes <csikes@brightok.net>

Subject: [11827] CMOS 111 Negative Keying...Thanks
Message-ID: <199702122302.RAA24580@sooner.brightok.net>

Hi folks, Thanks for the responses to my question. Most suggested a reed relay in the keying line. I will talk to Bill, he is a CFO guy and can burn the air waves with his key. 72 to all, Clif

Clifton Sikes

AB5UA
Earlsboro,Ok.

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "John Kirk, VE6XT" <jakirk@freenet.calgary.ab.ca>
Subject: [11732] Color Burst Rigs
Message-ID: <Pine.A32.3.93.970211184358.52006A-100000@srv1.freenet.calgary.ab.ca>

While you folks are toughing it out on the color burst frequency, think about that other homebrewer's special: the 3.686 MHz CPU crystal. Up here, at least, 3.686 MHz makes a lot more sense. Less QRM, closer to the phone band for those with no tuners, higher probability of QSO. Virtually every electronics distributor stocks them, usually at the same price as a color burst crystal. Or, if you are fortunate, dumpster diving at work yields scads of them....

73
John

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Marshall G. Emm" <mgemm@mtechnologies.com>
Subject: [11825] CQC CONTEST!
Message-ID: <33024497.4C86@mtechnologies.com>

This is a multi-part message in MIME format.

-----6A048C03D96
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

It's getting close! About ten days to go until the CQC Winter QSO Party. This one's a biggie, so don't forget to mark your calendar.

Members are worth extra points, but if you are not a member you still have time to join. Visit the CQC web site--
<http://www.mtechnologies.com/mthome> and look for the CQC logo near the

bottom of the page, or send email to rschneid@ix.netcom.com for instructions on how to get a CQC number FAST!

Following are the the rules. 73 from AA0XI and goold luck in the contest!

-----6A048C03D96

Content-Type: text/plain; charset=us-ascii; name="qso.txt"

Content-Transfer-Encoding: 7bit

Content-Disposition: inline; filename="qso.txt"

CQC 1997 Winter QSO Party

Date/Time: Sunday, February 23, 1997 2200 UTC Feb.23 to 0359 UTC Feb.24

Exchange: RS(T), State/Province/Country, First Name, and Member # if CQC member, power output if not ie: 579 CO Jim NR 04 Suggested frequencies CW 1825, 3560, 3710, 7040, 7110, 14060, 21060, 21110, 28060, 28110 SSB 1910, 3985, 7285, 14285, 21385, 28385 No contacts on 30, 18 and 12 meters allowed Classes: Single Band, Multi-band, Novice/Tech (all single operator only)

QSO Points: CW- CQC member 6 pts, non-member 4 pts SSB- CQC member 3 pts, non-member 2 pts Multiplier:

States/Provinces/Countries worked. The same station may be worked on different bands for additional QSO points and multipliers.

Contacts on the same band using a different mode counts for QSO points, but not as an additional multiplier.

Names: Total of first names from Name sheet. One first name per letter of the alphabet. Name must be same as Callbook, QSL card, or name commonly known by.

Score: Total Score = QSO Points x Multipliers x Names

*Bonus points for working Club Station W0CQC - Add 1000 points to your FINAL score for working W0CQC

Power: Stations must use 5 watts or less output, CW or SSB. There are no power multipliers.

Awards: To Be Determined, Highest Score in each class .

Submit log showing: Band Mode Time UTC Station Called RST Rc'd SPC Rc'd Name Rc'd Memb#Rc'd (or pwr out if not CQC member) Mult. Points

For sample Log, and Name sheets, send SASE and one unit first
class postage to: Jim-KG0PP-CQC Contest P.O.Box 31575 Aurora, CO
80041-0575

-----6A048C03D96--

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [11826] DATA SHEET: "nF" value Caps
Message-ID: <199702122252.PAA24412@zia.aoc.nrao.edu>

I've received several emails inquiring about nF (nano Farads). Nano
is 1×10^{-9} (.000 000 001 F). It is a unit of measure starting to see
more use in both amateur and professional publications.

Here's the "data sheet" on "nF" caps:

1nF = .001uF = 1000pF
10nF = .01uF
100nF = .1uF

Good question; will have to add it to the data sheets on caps next
time I post them.

72, Paul NA5N

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [11747] DATA SHEET: Capacitors #1
Message-ID: <199702120640.XAA15353@zia.aoc.nrao.edu>

DATA SHEET de NA5N: CAPACITORS (part 1 of 2)

CONTENTS: Brief description of major capacitor types (non-electrolytic)
Capacitor identification and coding schemes
Temperature Characteristics

***** CAPACITOR TYPES: (non-electrolytic) *****

DISK CERAMICS consist of two metallic plates whose area and spacing determines the capacitance, separated with a ceramic film dielectric and housed in an epoxy molding.

>Advantages: inexpensive, small, high C per unit size

>Disadvantages: high capacity changes over the temperature range

>Uses: blocking, coupling, bypassing and energy storage applications

>Use only NPO (see below) for critical timing or oscillator circuits

MONOLYTHIC/MULTILAYER CERAMICS are very similar to disk ceramics in characteristics and usage. The major difference is monolythics are made from MULTIPLE layers of electrodes and dielectric films to yield high C in small packages. For this reason, they are also called MULTILAYER ceramics. The multilayered element is usually thermally fused to yield a chip ... which by itself is packaged as a surface mounted chip capacitor, or surrounded by an epoxy moulding to form a monolythic capacitor.

>Advantages: inexpensive, small, high C per unit size

>Disadvantages: high capacity changes over the temperature range

>Uses: blocking, coupling, bypassing and energy storage applications

>Use only NPO (see below) for critical timing or oscillator circuits

POLYESTER FILM capacitors use layers of metal and polyester (mylar) dielectric to make a wide range of capacitances in a small package and have become the standard for DC applications.

>Advantages: inexpensive, small, high C per unit size

>Disadvantages: high capacity changes over the temperature range and high loss factors, limiting their use at high frequencies

>Uses: blocking, coupling, bypassing and energy storage applications

POLYCARBONATE FILM capacitors are layers of metalized film and polycarbonate dielectric for an almost ideal capacitor. These caps have become the standard for Mil-spec film dielectrics.

>Advantages: high insulation resistance, minimal capacitance change with temperature and low loss (dissipation factor).

>Disadvantages: costly (3-5 times a disk ceramic)

>Uses: blocking, coupling, bypassing, frequency discrimination (like RC filters), critical timing circuits, precision oscillator circuits, and operation in high temperature environments.

POLYPROPYLENE FILM capacitors use layers of metal and polypropylene dielectric for low moisture absorption and high breakdown voltages.

>Advantages: Low loss factors and good capacitance stability over the temperature range for high frequency applications, H.V. circuits.

>Disadvantages: Polypropylene has a low dielectric, resulting in larger physical sizes for comparable capacitances and working voltages than most other capacitor types. About twice the cost of disk ceramics.

METAL vs METALIZED FILMS. Capacitor electrodes have traditionally been made from metal alloys. Metalized films use vacuum sputtering techniques

to coat a dielectric film with a metal composition to form high C on very thin pieces of film, making for very small sizes. They also tend to be "self healing" in that a high voltage arc will vaporize the metal deposit but will be contained by the dielectric, such that the damage remains localized. An arc will thus not short the capacitor, a common problem with older metal alloy types.

***** CAPACITOR IDENTIFICATION *****

Capacitors are identified by:

1. Direct value marking (i.e. "27pF 35V")
2. EIA Identification Coding (i.e., "104M"= .1uF, 20%)
3. Color coding schemes (pretend this is red-yellow-orange!)

Since color coding schemes are disappearing except for some foreign made tantalums, and direct marking is fairly obvious, only the EIA coding scheme is described.

Typical EIA coded capacitor: *****
 * Z5U * ---> Temperature characteristics
 * 224J * ---> Value and tolerance

 | |

TEMPERATURE CHARACTERISTICS:

Min. Temp. (degrees C)	Max. Temp. (degrees C)	Cap. change over temp. range (+/- percentage)			
X=-55C	2=+45C 4=65C	A=1% B=1.5% C=2.2%			
Y=-30C	5=+85C 6=+105C	D=3.3% E=4.7% F=7.5%			
Z=+10C	7=+125C	P=10% R=15% S=20%			
		T=-33%,+22% U=-56%,+22%			
		V=-82%,+22%			

THEREFORE, a Z5U has an operating temperature range of +10C to +85C and its capacitance changes from -56% (at +10C) to +22% (at 85C).

VALUE AND TOLERANCE:

Example: "2 2 4 M"

--- - ----->		Tolerance Codes (+/- %)				
		F=1pF or 1% G=2pF or 2% (if C>10pf, then %)				
		J=5% K=10% L=15% M=20% N=30%				
Capacitance	Number	P=0%, +100% W=-20%, +40%				
in pF	of zeros	Y=-20%, +50% Z=-20%, +80%				

THEREFORE, a 224M = 22 0000pF = .22uF, 20% tolerance

QUICK REFERENCE CHART (Decade values)

1R0 = 1pF	103 = .01uF
100 = 10pF	104 = .1uF
101 = 100pF	105 = 1uF
102 = .001uF	106 = 10uF

1010= Some numbers used on 10 meters!

AFTER ALL OF THAT ... when ordering capacitors, the THREE most common sold by most mail order vendors are

Z5U (Class 1) +10C to +85C, -56%,+22%
X7R (Class 2) -55C to +125C, 15% (fairly flat <100C)
and NP0 (Class 3 or C0G) ... -55C to +150C, <1.5% (ideally flat)

The "N" codes indicate the amount of NEGATIVE capacitance change per degree C.

Thus, NP0 = 0 ppm/deg C
N150 = -150 ppm/deg C
N750 = -750 ppm/deg C ... ETC.

WARNING: The Surgeon General has determined that chewing on orange tantalum "gum drop" capacitors may be hazardous to your health.

GL and have fun, Paul NA5N (pharden@nrao.edu)

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [11748] DATA SHEET: Capacitors #2
Message-ID: <199702120641.XAA15370@zia.aoc.nrao.edu>

DATA SHEET de NA5N: CAPACITORS (part 2 of 2) updated 3-95

Contents: SELECTION AND ORDERING GUIDE
DEFINITION OF TERMS
STANDARD VALUES OF CERAMIC/FILM CAPS

***** SELECTION GUIDE *****
(PRINCIPAL CHARACTERISTICS OF MAJOR CAPACITOR TYPES)
To compare characteristics between the major types

CHARACTERISTIC CERAMICS POLYESTER POLY- POLY-
 (X7R's) FILM CARBONATE PROPYLENE TANTALUM

Capacitance range 10p-1uF .001-15uF .001-22uF .001-30uF .01-1000uF
Typical tolerance +/-20% +/-20% +/-10% +/-10% +/-5%
Voltage range 50-200v 50v-15kv 30-600v 100-800v 6-125v
Temperature range -55,+125 -65,+150 -65,+125 -65,+105 -55,+125
Temp. Coefficient +/-15% +/-15% +/-2% +/-2% +/-8%
Insulation Resistance

for <1uF, Megs/uF	10**4	10**4	10**5	10**7	70M ohms
for >1uF, Megs/uF	10**4	10**3	10**5	10**5	10M ohms
Dissipation factor					
at 1KHz	2.5%	1.0%	0.3%	0.1%	8-24%
Dielectric Absorption	2.5%	0.5%	0.35%	0.05%	na
Stability (1000hrs)	10%	10%	5%	3%	10%

Design Considerations:

-Physical size	1	4	5	8	3
	small	moderate	large	largest	moderate
-Cost factor	1	1	3-5	2-3	3
	low	low	high	moderate	moderate
-Stability	moderate	moderate	excellent	excellent	moderate
-Temp. stability	poor	poor	excellent	excellent	moderate
-Freq. usage	DC-low	DC-low	HF-VHF	HF-VHF	DC-low

REFERENCES: Mallory Electronic Components Catalog
 Sprague Film Capacitor Catalog
 Sprague Capacitor Designers Guide for Engineers
 MuRata/Erie Ceramic Capacitor Catalog

DEFINITIONS:

- *CAPACITANCE TOLERANCE is the maximum deviation between the nominal value (as marked on the capacitor) and the actual capacitance.
- *WORKING VOLTAGE is the nominal continuous voltage which may be applied without altering any characteristics. (Usually the max. applied volt. without causing arcing/damage is the WVDC x 200%).
- *TEMPERATURE COEFFICIENT (TC) is the change in capacitance per degree C. A NEGATIVE coefficient is a REDUCTION in C as the temp. INCREASES.
- *STABILITY (aging) is the change in capacitance over time, usually spec'd at 1000hrs. Aging decreases logarithmically and thus the majority of capacitance change due to aging occurs within the first 1000 hours.
- *DISSIPATION FACTOR (DF) is the ratio of energy dissipated to the energy stored in the capacitor. The DF is frequency sensitive and is usually specified at a given frequency.
- *QUALITY FACTOR (Q) is the ratio of energy stored to the energy dissipated, or the inverse of DF. Also specified at a given frequency. (Usually the dissipation factor OR the Q is specified, not both)
- *DIELECTRIC ABSORPTION is the amount of energy dissipated in the capacitor due to losses in the dielectric.

NOTE: The importance of these dissipation factors is what percentage of the power (current and voltage) applied to the capacitor will be LOST due to the dielectric and electrode resistance. This loss is primarily converted into HEAT which will 1) change the capacitance of the device depending upon its temperature coefficient, and 2) can cause damage to the capacitor if its ratings are exceeded. At RF frequencies, the power dissipated is the PEAK-TO-PEAK values, which can be large!

*INSULATION RESISTANCE (IR) is the DC resistance of the capacitor measured across the terminals. It is a function of the resistance in the metal electrodes and the resistance losses of the dielectric. Thus, the IR will be lower for higher values of C (since it consists of more metal and dielectric materials for higher capacitances).

*EQUIVALENT SERIES RESISTANCE (ESR) is the sum of the electrode resistance plus the losses due to the dielectric. Dielectric losses are REACTIVE since losses are frequency sensitive. ESR represents the "real" part of the reactance (of the form "R+j").

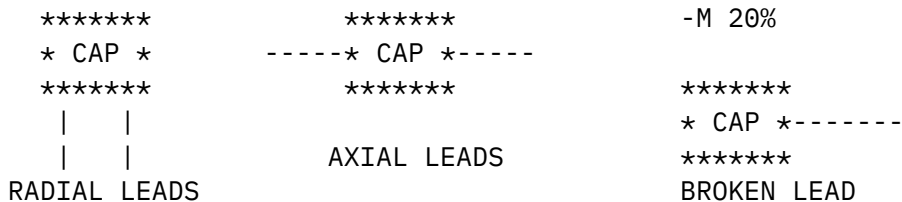
***** STANDARD VALUES OF CERAMIC AND FILM CAPACITORS TO 1uF *****

10pF	100pF	.001uF	.01uF	.10uF	Not all standard values are available in certain families of capacitors or for all voltage ratings. Some manufacturers also have additional values.
15	150	.0015	.015	.15	
22	220	.0022	.022	.22	
27	270	.0027	.027	.27	
33	330	.0033	.033	.33	
47pF	470pF	.0047uF	.047uF	.47uF	Always specify the tolerance desired, otherwise the highest (worst) tolerance will be assumed!
56	560	.0056	.056	.56	
68	680	.0068	.068	.68	
75	750	.0075	.075	.75	
82pF	820pF	.0082uF	.082uF	.82uF	
				1.0uF	

And, just a reminder:

Common tolerance codes:

- J 5%
- K 10%
- L 15%
- M 20%



GL de Paul NA5N (pharden@nrao.edu)

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
 From: Paul Harden <pharden@aoc.nrao.edu>
 Subject: [11750] DATA SHEET: Diodes
 Message-ID: <199702120646.XAA15492@zia.aoc.nrao.edu>

NA5N DATA SHEET: SMALL SIGNAL AND RECTIFIER DIODES

Some common preferred devices typical to QRP rigs and as available from DigiKey, Mouser Electronics, etc.

DIODE TYPE	***** SMALL SIGNAL DIODES *****										(Pd=50mW)		
	Bv	Vr	Ir	Vf @	If	Ir @	Vr	Trr	CdM	Cd(pF) @	Vr=		
	(V)	(V)	(nA)	(V)	(mA)	(mA)	(V)	(nS)	(pF)	.1v	1v	10v	
1N914	GE	75	75	25	1.0	10	25	20	4000	4	2.3	1.8	1.3
1N914A	GE	75	75	25	1.0	20	25	20	4000	4	2.3	1.8	1.3
1N914B	GE	75	75	25	1.0	100	25	20	4000	4	2.3	1.8	1.3
1N4148	GE	75	75	25	1.0	10	25	20	4	4	2.3	1.8	1.3
1N4448	GE	100	75	25	1.0	100	25	20	4	4	2.3	1.8	1.3
1N4150	GE	50	50	50	.7	10	100	50	4	2.5pF Max.			

1N4148 is low storage-time version of 1N914

***** RECTIFIER DIODES (Low Power) *****									
DIODE TYPE	Bv (V)	If (A)	I _{fs} (A)	V _r (rms) (V)	I _r (uA)	V _f (V)	T _{rr} * (uS)	Cd at 0.1v	V _r =10v
1N4001	50	1.0A	30A	35v	30	0.8v	3.5	50pF	20pF
1N4002	100	1.0	30A	70	30	0.8v	3.5	50	20
1N4003	200	1.0	30	140	30	0.8v	3.5	50	20
1N4004	400	1.0	30	280	30	0.8v	3.5	50	20
1N5400	50	3.0A	200A	50v	500	1.2v	3.5	50	20
1N5401	100	3.0	200A	100	500	1.2v	3.5	50	20
1N5402	200	3.0	200	200	500	1.2v	3.5	50	20
1N5404	400	3.0	200	400	500	1.2v	3.5	50pF	20pF
Schottky Rectifiers (very low V _f)									
1N5817	20	1.0A	25	14	1000	0.3v		190pF	90pF
1N5818	30	1.0	25	21	1000	0.3v		160	65
1N5819	40	1.0	25	28	1000	0.3v		115	50

Bv= Breakdown v. If=Avg. forward current I_{fs}=Max. surge current
 Ir= Max. DC reverse current Vr(rms)=RMS reverse volt.
 Vf= Avg. forward voltage drop Cd=junction capacitance @ given Vr
 CdM=Maximum junction capacitance
 Trr= Reverse recovery time at If=10mA to 1mA
 Trr*=Reverse recovery time at Ir/If=1 (for rectifying AC)

REFERENCES:

1. GE Semiconductor Data Book
2. Motorola Rectifier Device Data Book (DL151/D) 1992

3. Motorola TVS/Zener Device Data Book (DL150) 1992

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [11749] DATA SHEET: IRF-510
Message-ID: <199702120642.XAA15441@zia.aoc.nrao.edu>

DATA SHEET: IRF510 POWER MOSFET TRANSISTOR

Manufactured by Harris Semiconductors
Available at most Radio Shacks (although incorrectly labeled "IFR510")
Cost: \$1.99 at Radio Shack (Cat. No. 276-2072)

DESCRIPTION.

The IRF510, IRF511, IRF512 and IRF513 are n-channel enhancement-mode silicon-gate power field-effect transistors. These power MOSFET's are designed for applications such as switching regulators, motor drivers, relay drivers, and drivers for high-power bipolar switching transistors requiring high speed and low gate-drive power. These types can be driven directly from integrated circuits.

MAXIMUM RATINGS		IRF510	IRF511	IRF512
Vds	Drain-source voltage	100v	80v	100v
Vdgr	Drain-gate voltage	100v	80v	100v Rgs=20K
Vgs	Gate-source voltage	+/-20v	+/-20v	+/-20v
Id	Continuous drain current	5.6A	5.6A	4.9A

ELECTRICAL CHARACTERISTICS (All types unless otherwise stated)

Igss	Gate-source leakage	500nA (forward)	-500nA (reverse)
Idss	Drain current, Vg=0v	250uA	
Id-on	On state drain current	5.6A IFR510, IFR511 4.9A IFR512, IFR513	
Rds-on	Drain-source "on" Res.	0.4-0.54 ohms	(device ON resistance)
Cis	Input capacitance	135pF	(at Vds=12v, Cis=180pF)
Cos	Output capacitance	80pF	(at Vds=12v, Cos=130pF)
Td-on	Turn-on delay time	8-11nS	) These parameters define how fast the MOSFET turns on and off when gate is driven with a square wave
Tr	Rise time	25-36nS	
Td-off	Turn-off delay time	15-21nS	
Tf	Fall time	12-21nS	
Vsd	Diode forward voltage	2.5v	(dropped across the source-drain

due to the internal diode)

SOME DATA FROM THE PERFORMANCE CURVES

Output drain current (I_d) vs. gate-source voltage (V_{gs}) at $V_d=+12v$

$V_{gs}=4v$ $I_d= 0A$
 $V_{gs}=5v$ $I_d= 1A$
 $V_{gs}=6v$ $I_d= 2.8A$
 $V_{gs}=7v$ $I_d= 4.8A$
 $V_{gs}=8v$ $I_d= 6.8A$

NOTE: Therefore, for a 5W QRP power amplifier, the gate-source voltage should not exceed 5-6v; otherwise excessive current will attempt to flow. A continuous applied $V_{gs} > 7.5v$ will cause I_d to exceed the maximum drain current rating of 5.6A (IRF510). This will cause "catastrophic substrate failure" (commonly known as smoke!).

What is the maximum frequency? Max. frequency is not specified, but since $T_r = 36nS$ (rise time) and $T_f = 21nS$ (fall time), a total device delay of 57nS occurs, worse case. $f=1/t = 1/57nS = 17.5$ MHz. Total "typical" device delay is $25+12ns = 37nS$ for $f = 27$ MHz. This does not take into account L/C loading of the output filter, etc., which will lower the maximum frequency which the MOSFET will toggle on and off.

PIN-OUT

```

-----
|  0  |
|     | <--- Metal Flange (Drain)   ISOLATE FROM GROUND!!!
-----
| IRF  |
| 510  | <--- Plastic TO-220 case
|     |
|-----|
I I I
I I I <--- Leads   (Max. temp = 300C for 10 seconds, max)
I I I
G D S

```

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bob Reynolds <breynold@sigg.com>
Subject: [11792] DIGITREX - SOLD
Message-ID: <97Feb12.105243cst.19652@firewall.sigg.com>

Thanks QRPers

73, Red K5VOL ARCI # 4016

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bob Reynolds <breynold@sigg.com>
Subject: [11791] DIGITREX -SOLD
Message-ID: <97Feb12.105100cst.19652@firewall.sigg.com>

It's gone to a good home.

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Conard Murray <ws4s@InfoAve.Net>
Subject: [11780] DX-70 AGC QRP mod circuit needed
Message-ID: <2.2.32.19970212154540.00b56988@infoave.net>

Hi,

I remember seeing someone discuss a circuit using a 9 volt battery and a pot for controlling the power output on the Alinco DX-70T by applying a control voltage to the AGC port.

I would appreciate the specifics so I can duplicate the circuit.

Thanks,

Conard WS4S

.....
. Conard Murray WS4S Glowbugs listowner .
. 217 Dyer Avenue ws4s@infoave.net .
. Cookeville, TN 38501 615-526-4093 .
. <>< Wise men still seek Him ><> .
. QRP-L # 993 .
.....

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: faunt@netcom.com (Doug Faunt N6TQS +1-510-655-8604)
Subject: [11807] Farnell catalog
Message-ID: <199702122021.MAA04631@netcom16.netcom.com>

I finally got this two days ago. If you will recall, I'd called 800-718-1997 as was suggested, and ended up with a Newark catalog, useful, but not what had been described. I went to the web, found Farnell's web page, and asked for the catalog there, and got a real Farnell catalog. It's bigger than the Sears catalog used to be. Lots of neat things, with a distinct European accent. If you haven't got one, and you order from this sort of supplier, then it's worth while making whatever fuss is necessary on the above number, or hitting their web page to get one. OTOH, the one I got is only good through March '97. You might want to try for a newer one.

This will get you Farnell's page:
Farnell

Obligatory 38S mention and digression: It's on hold; I decided to rearrange the shack, discovered another old house wiring hack, and am now working with 12-3 Romex and lath and plaster walls, instead of #24 stranded and .040 aluminum. Anybody who would install a receptacle, using #16 rubber jacketed extension cord wire, spliced into the knob-and-tube wiring inside the wall, should have their thumbs amputated. And there is a reasonably well installed receptacle (lead covered #14) on the other side of the wall that would have been easy to connect to.

73, doug

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: lve1@inel.gov (Larry V East)
Subject: [11818] Fox tonight!
Message-ID: <2.2.16.19970212201231.2d072cfa@eloi>

Time: 0130-0330 UTC Feb. 13
(That's Wednesday evening, Feb. 12, in the USoA)
Freq: 7.041 - 7.045 (I'll try to be close to 7.043)
Call: W1HUE
QTH: Idaho Falls, ID

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bob Reynolds <breynold@sigg.com>
Subject: [11785] FS Digitrex
Message-ID: <97Feb12.102752cst.19650@firewall.sigg.com>

Digitrex CW/DSB XCVR 50% built, componets for 40 and 20
meters, digital display, adjustable 0-10 watts. \$40 +shipping

Red, K5V0L

breynold@sigg.com

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Jim Hydzik <congress@magpage.com>
Subject: [11763] FSFD (50 States) Update for Feb. 12
Message-ID: <199702121241.HAA03336@alaska.magpage.com>

Hello ALL, (QRP activity info at <http://www.dancris.com/~ki7mn>)

Please read NOTE 1 at bottom of page.

The 50 States In 50 Days (FSFD) activity started Jan 01 and runs through
Feb. 19. Below is a the schedule of the remaining States. We will attempt
to provide digested schedules of states/times/bands/freqs to help reduce
message traffic to the reflector. Typically, only 1 message per day.

ALL TIMES UTC

Feb. 12 Wednesday TEXAS NR3E, Dave 2205-2305 UTC 10.118
2305-0105 UTC 14.045
0105-0305 THR-UTC 7.045
Novice 0305-0405 THR-UTC 7.120
0405-0505 THR-UTC 3.540
Novice 0505-0605 THR-UTC 3.705
0605-0800 THR-UTC 7.045

W5TFB, Jack 2000-2100 UTC 14.055+
2200-2300 UTC 10.120-
0000-0100 THR-UTC 7.037+
0100-0230 THR-UTC 3.565-

K5W0, Bob 0000-0100 THR-UTC 1.805
0100-0200 THR-UTC 3.555
0200-0300 THR-UTC 1.805
0300-0400 THR-UTC 3.555

W5HNS, Henry 1400-1500 UTC 7.035
1500-1600 UTC 10.116
1600-1700 UTC 14.060

			1900-2000	UTC	21.060
			2000-2100	UTC	14.060
			2200-2300	UTC	7.035
			2300-2400	UTC	10.116
			0000-0100	THR-UTC	3.557
			0100-0400	THR-UTC	7.035

Feb. 13 Thursday	UTAH	UTAH	AB7ST, Bob	1600-1700	UTC 10.118
				1800-1815+	UTC 21.060
			+ indicated will go longer if busy	2200-2300	UTC 14.055
				2300-2400	UTC 10.118
				0100-0200+	FRI-UTC 7.038

Feb. 14 Friday	MISSISSIPPI		K5XU, Mike	0000-0450	SAT-UTC 7.037+
				0100-0145	SAT-UTC 3.556+
				0200-0230	SAT-UTC 7.037+
				0230-0300	SAT-UTC 3.556+

Feb. 15 Saturday	WYOMING		N7MR, Mike\	2000-2100	UTC 14.051+
			N0EKU, Ray \	2000-2100	UTC 3.685+
			KB0RFA, Dennis	2100-2200	UTC 7.035+
			Look for all 3 callsigns /	2200-2300	UTC 10.117+
			KB0WSU, Raul		TBA
4	VIRGINIA		N7RI, Ralph	1400-1600	UTC Top of Hr=14.060
					Bottom of Hr=10.106
S				1900-2100	UTC same as above
Today				0000-0230	SUN-UTC 7.035-045
A				0300-0500	SUN-UTC 3.560 at
T					Top and Bottom of hr.
E					
			S Early WASHINGTON	KJ7NS, Phil	0200-0300 SUN-UTC 7.112-15
					0300-0400 SUN-UTC 7.040-01
			MISSISSIPPI DAYTIME	K5XU, Mike	We're working on it 15-40M

Feb. 16 Sunday	WASHINGTON		N7MFB, Bill	1600-1800	UTC 7.037
				2100-2200	UTC 14.058
			RTTY RTTY-->	2200-2300	UTC 14.086
			SSB-QRP-->	N7TCZ, Jim	1800-2000 UTC 28.385
			K7MP, John	TBA	TBA TBA

Feb. 17 Monday	Washington D.C.		N3FRT, Bob	1030	UTC 7.042
				1100	UTC 7.110

1130	UTC	7.042
1200	UTC	7.110
1230	UTC	10.116
1700	UTC	21.125
1730	UTC	14.045
0000	TUE-UTC	10.116
0030	TUE-UTC	7.110
0100	TUE-UTC	7.042

WE5X/3, Steve TBA TBA TBA

 Feb. 18 Tue. CANADA So far: VE3FLB/VE3JC/VE5RC/VE7CQK.
 NEED MORE CANADIAN STATIONS!

Feb. 19 Wednesday VERMONT W1EAT, Tom TBA

Feb. 22-23 FYBO and FSFD Blow Out So far: AL7FS, KJ7UN, NR3Z, N7CQR, WB0QQT.
 Like to get some 20M-30M action in the afternoon!!!

The FSFD Blow Out Weekend is in the planning stages to work with and in FYBO.
 More info to follow. Looking for North Dakota this weekend.

NOTE 1. Most sign-ups came with a note saying they would go longer if busy.
 Frequencies are +/- QRM & typ. may reach as far as 3-4 KHz from posted freq.
 If a major QRP frequency is listed, like 7.040, it means close by if possible.
 We will attempt to avoid being right on 7.040, 14.060, 10.116, etc.

CALLING CQ: A suggestion. If we call CQ WAS or WAS QRP de K6.... etc,
 we give those not on QRP-L an indication of what we're doing. FSFD type
 calling might be too cryptic for all but ourselves. However 'FS' is fine
 when busy. Exchange RST, State/Province/Country, and Name. Power level is
 nice to know.

If you want to sign-up for an upcoming State, e-mail band/freq/time directly to:
 congress@magpage.com

Remember, Jim K1MG starts up 50/40 activity next month. Watch for messages.

Jim K3QIO Wilmington, Delaware

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
 From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
 Subject: [11735] Got Embedded Research
 Message-ID: <Pine.3.89.9702112026.B2267-01000000@w3eax.umd.edu>

Thanks

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dave Fifield <fifield@pacbell.net>
Subject: [11756] HB: 38S Additional Filtering?
Message-ID: <33015FC6.2595@pacbell.net>

Rich wrote:

> Has anyone added the additional i.f. filtering to the 38s? Reports?

I'm working on it Rich. Should have some results by next week. I'll post them asap when I do.

72, Dave Fifield, KQ6FR

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dave Fifield <fifield@pacbell.net>
Subject: [11755] HB: 38S Key Thumps
Message-ID: <33016A82.1DAD@pacbell.net>

38S experimenters (whoops, need a space in there methinks.....)

Whilst helping to develop Ori's design into a full fledged kit, the one "feature" that we could not cure was the key thumps. I spent many hours searching for the source of the thumps and never got to a final conclusion!

The timing of the -T and -R signals into the 4066 switch seemed to matter. After some experimentation, I found that delaying these signals by slightly different amounts helped reduce the thump to a level that was almost acceptable but not perfect (you should have heard it before we added the delay components!!!). BTW the delay is achieved with D4/5, R7/8 and C12/13 - you can fiddle with the values of R7 and R8 if you'd like to "fine tune" your rig for minimum thump (but it won't go to zero).

Like I said, I never got to the bottom of the problem. I did rule out the RF leakage from the T/R switch getting into U1 and causing problems. It's definately not that!

There were negative excursions on just about all the signals entering and exiting the 4066 switch - it was not possible to isolate which was the source and which were effects. However, since there appeared to be a significant thump pulse even on pin 1 of the 4066 (from the xtal filter), I concluded the following: the T/R changeover pulse that causes the thump is being generated INSIDE the 4066 device, and as such, there is not a whole lot that can easily be done about it.

Perhaps someone with some spare experimentation time (Mike?) could try to add another 4066 device in parallel with the existing one, but split out the switches into different devices. This might just tell us something. It's possible that the pulse is being propogated from one switch to another inside the device. Remember, this device was not really designed for the exceedingly small signals were using it for; it was really meant to switch large signals (of the same order of magnitude as the power supply voltage at least).

Keep hunting, we'll crack the problem yet!

72, Dave Fifield, KQ6FR

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Mark A. Arvidson" <arvidson@swbell.net>
Subject: [11737] HB: Parts/circuit recognition
Message-ID: <33013F2A.6A95@swbell.net>

Hello, again, QRP-L-mers!

I've gotten such great help here before and have seen others get great help, that I've got more slightly long-winded questions (they never stop)...

I got an old Montgomery Ward AM/FM/8-track/cassette at a garbage (pronounced "gar-BAHJ") sale. It had the standard analog sweep indicator, but what got my attention was the 4-digit led readout that was titled "Frequency Counter." I plopped down my \$.50 and carried my prize home.

As I took it apart, I checked, and it seemed to be counting either KHz

(in AM mode) and MHz (xxx.x) in FM mode. It was powered off of 9VDC. Anyhoo, I haven't figured out how to make it count anything in particular, now that I've severed it's ties with it's previous case. I plugged in a 9V battery, and it lights up and shows a variety of different numbers. The AM light is on, so I assume it's showing KHz, but I don't know what its reading...

As far as wires to the outside world (inside the case before), it has a yellow (+9VDC), two green (ground), light green, brown, orange, black and a blue mini-coax (smaller than RG-174?). It has two ICs: marked "P132 DS 8629N" and "/B8141 MM5430N" The second is the LED controller Both IC's have a double ~ logo. NTE and two cross-ref books didn't have anything I can find on these...

I could try to make a schematic, but I'm not that great at parts recognition (obviously), and I'm not sure if I can tell a molded choke from a 1/2 watt resister... (there's a big grey doohickey - 680 Mohm?)

So, my questions are: Can this be useful to me? If so, how?

Anxiously awaiting enlightenment...

Mark Arvidson of the Many Questions
KB0SPQ (still...)

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bill Todd <bill@techline.com>
Subject: [11758] Heard Is. stories Wanted
Message-ID: <1.5.4.32.19970212074422.0067a5c0@mail.techline.com>

Hi group(s) -

I posted this note to the QRP-L and the NWQ-L about a week ago. Some of you folks might have missed it, so I'll send it out one more time.

Thanks - Bill-N7MFB

>Did you happen to work the recent Heard Island DXpedition? If so,
>our NorthWest QRP Club DX Editor would like to hear from you.
>
>Ward Silver, N0AX (our DX Editor) wants to include your story in an
>article he is preparing for our April 97' "NWQ" Newsletter. You can
>contact Ward at the following E-Mail address:
>

> hwardsil@wolphenet.com
>
>(note: remember to include the "e" in "wolphenet" (I've made that mistake
>myself a time or too! hi).
>
>CUL, Bill-N7MFB

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: David Adams <adamsclan@netgate.net>
Subject: [11746] Help! I need Dayton rooming
Message-ID: <3301637C.4146@netgate.net>

Greetings folks, as Myron has been mostly out-of-touch (health problems as I understand), I am in desperate search for a roomy or a room for dayton. Any pointers appreciated...the local norcal group can verify that I don't stink or anything (at least I think they will verify that...the smelly is always the last to know...).

73 de dave, n9uxu

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [11733] Help: Re: Embedded Research (fwd)
Message-ID: <Pine.3.89.9702112040.G2140-0100000@w3eax.umd.edu>

This was posted on the TT list; Gary, Scott, anyone?

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

----- Forwarded message -----

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: ori@juno.com (Ori K Mizrahi-Shalom)
Subject: [11789] High-Capacity NiCad Batteries
Message-ID: <19950212.083655.4423.9.ori@juno.com>

A fellow ham found a new type of rechargeable batteries. He checked them on his H-T and got about double the talk-time of the standard cells he was using.

Manufacturer: Panasonic
Type: AA, High-Capacity NiCad
Terminal voltage: 1.2V
Capacity: 1100 mA-H
Price: \$15 for 4 batteries and a charger
(at Price-Costco)

For a reference, other AA-type batteries offer the following:

Alkaline: 1.5V/2400 mA-H
recharg. Alkaline: 1.5V/1300 mA-H, 25 charges, capacity after 10
charges
standard NiCad: 1.2V/600 mA-H, 300+ charges

Usual disclaimers.

ORI AC6AN

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dah-Jyuu Wang <ddw2@Lehigh.EDU>
Subject: [11813] Homebrew L/C Meter
Message-ID: <1.5.4.32.19970212205145.006a1d4c@lehigh.edu>

Gang,

FYI, I had build a L/C meter appeared in "Electronics Now" last year (or may be 1995?). It uses a 16C61 PIC chip and an LCD display. It boasts self-calibration and an accuracy of 2%. I decided to build one from scratch (accodring to ham's spirit, etched my own circuit board, programmed my own PIC chip, etc. Not to metion, build my own programmer for the PIC chip). It works FB just like the author said in the article. For you homebrewer out there, this is a must for identifying/making your inductors and capacitors. The author did offer for sale the meter in kit form and the price is reasonable. He even put the source and HEX file on EN's ftp site. I downloaded the files and found that they are for the two-line type of LCD so I modified it to work for my one-line by 16 LCD and it works ok. In addition, I replaced the 16C61 with a 16C84 (EEPROMtype for easy prototyping). I would be willing to help if anyone is interested in such a project.

I had been reading QRP-L in digest form lately as I was busy moving and still don't have an antenna up, so no rf activities for me.

Later and 73's

DJ Wang, N2YKP/3
Dah-Jyuu Wang, Ph.D.
Department of Chemistry

Lehigh University
Bethlehem, PA 18015-3172
610-758-3463

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: ukii@megsinet.net (ukii)
Subject: [11811] I give..Whats the Mystery 10.130 source?
Message-ID: <01BC18F1.ECF07DA0@randolph2e2-12.megsinet.net>

Ok Guys...

I give up.whats the secret about the transmitting stations on 10.130?
Was reading the thread and with comments like

2. Numbers stations. You're almost certainly better off not messing
with them in any way. I've spoken to people that have DFed them to the
source, and I doubt any of us would be keen to repeat the experience
these folks had.

If they are doing crypto, don't
bother them. You don't want to know. :-)

Whats up? I guess some military/gov stuff??? tell me or I will send YOU
my 38s to fix!

Thanks...
73 de john
n9ukx

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: borealis@juno.com (Philip G. Collier)
Subject: [11794] Intruding Numbers Station near 10.130
Message-ID: <19970212.124700.2511.0.borealis@juno.com>

Has anyone noticed the numbers station near 10.130MHz sending 5 figure
groups? It was on thin morning between about 1335 to 1346 GMT, booming
into upstate New York. There didn't seem to be any audible amateur sigs
on the band then, and the RTTY station was barely audible here.

I tried tellin' em to move off with that crypto stuff, but I just
couldn't take the frequency with my couple of watts <g>...

73,
Philip Collier KG2DH

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Jerry Parker <jparker@fix.net>
Subject: [11738] IRF 510'S ON SPECIAL
Message-ID: <2.2.32.19970212041428.00bfd1ac@fix.net>

Dan of Dan's Small Parts and kits has just put IRF 510's on special at
5 for \$4.50!

Check his specials page out.

<http://www.fix.net/dans.html>

Enjoy,,,Jerry...K
Jerry ... WA6OWR ... K

The NorCal Page

<http://www.fix.net/norcal.html>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>
Subject: [11725] k5fo contact
Message-ID: <1.5.4.16.19970212003404.23274582@mail49.mci2000.com>

What a terrific nite. First I worked EA5BLP with a 529 signal report, then N5VOG in Wichita Falls, TX with a 559 report, and then I hear K8IQY de K5FO. Nice to finally work Chuck on 30 meters, and he got to hear my slightly chirpy 38S doing it's thing. 569 reports both ways, so his GM30 at 0.95 watts is working well.

The 38S is getting lots of mileage in the past 3 days. Maybe I should consider putting it in a case, instead of having it spread out all over the bench! :-)

72, and keep building.....Jim

Jim Kortge, K8IQY (ex NU8N)		BMHA, NorCal, QRP-L
jokortge@tir.com		__o Cascade 17/40 SSB
Fenton, MI		_`\<, Mizuho 17/40 SSB
...	(*)/(*)	.

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [11779] KD7S E-meter
Message-ID: <199702121527.PAA20168@chuck.dallas.sgi.com>

Gang,

While at the NorCal meeting the first Sunday of this month in Sunny California (well it started out foggy, but we all know that it was going to burn off) several things of note.

At the Livermore meet I picked up a lifetime supply of SMT resistors of assorted values. You'd be surprised at how little 5,000 of these critters weigh. Now going to have to collect the caps and transistors next. :-)
It's a never ending battle to be the first kid on the block to collect one of everything, but someone has to try.

Ran over (well drove the rent-a-wreck) to the CA Burger official NorCal meeting place to see everything that I could. Just too much going on in one place.

Bill Jones had his beautiful 38 special in a handcrafted case and his E-dial using the three 10 bar LED displays. I managed to get a board and on the way out of CA on the following Friday I stopped at my favorite emporium of electronic critters and picked up the 3 ICs, 3 LEDs. The resistors and other stuff I knew I already had at the hacienda so skipped those. Did pick up two more TenTec TP-41 cases for more projects later. Anchor Electronics is the only place that I have seen TenTec cases available off the shelf. I do wish TenTec would get back into retail distributors again but I do understand the economics of the extra overhead.

So last night while calling what seemed like a never ending series of CQs on 40M I stuffed the board. In every project there is some lesson to be learned. Bill had some R/S bar displays and I had something completely different it turns out. One manufacturer may put the beveled edge on one end and another on the opposite side, so guess what? Yep, three puppies in backwards, but no problem. Solder sucker to the rescue and they were out and back in the right direction. Fired up and aligned beautifully. Bill, of course, does good work on his PC boards.

Look for the article in the next upcoming issue of QRPP. BTW, look at the last issue. Check your expiration date. Is it about time to renew? Be sure to remember the price increase so that you can get them first class mail and include some extra for their costs on the next issues that you may already be getting before the expiration date. Don't kill the goose that lays the golden eggs.

Debbie Blanke, KG6UI, had her Pixie with additions of transmit offset and an outboard audio filter with variable pitch. The latter she made up from a circuit from the Solid State Design book, but everyone has neglected to mention that she did make a significant mod that I'll let her either mention here or write it up in QRPP. As she had it configured you won't find it in the book. It worked really well and I now have to sit down and build one up to play with. It might be something to add to a lot of rigs or do like Debbie did and build one in a separate box powered off a 9V battery. Good work Debra. The rig was hooked up to Vern's Version of the St Louis Vertical SLV(3) but everytime I called CQ someone came over and hauled me off to someplace else. Didn't work anyone but did hear other QSOs in progress on 40M. See the NorCal web page and the 'additional pictures' section for closeups of the Pixie.

FYI

SIG

Chuck Adams K5FO adams@sgi.com DXCC=8
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: QLF%mimi@magic.itg.ti.com
Subject: [11766] KJ7YN de WB0CGH

Message-ID: <9702121407.AA14604@itg.ti.com>

From: Brad Bradfield QLF

Subj: KJ7YN de WB0CGH

John Nystedt, KJ7YN, please e-mail me your snail mail address. Your e-mail bounced. Sorry for the bandwidth y'all.

72's es 73's,

Brad, WB0CGH

```
*****
Brad Bradfield, PE                               Electrical Design Engineer
(H) 817-321-2960                                Texas Instruments, Inc.
(W) 972-462-6230                                (Soon to be: Raytheon/TI Systems)
                                                Real men talk with their fingers!
```

QLF@MSG.TI.COM

WB0CGH@W05H.#DFW.TX.USA.NA

ARRL Life Member QRP-L #377 SMIRK #4906 IEEE(M) ARS #72
Collector of wireless and landline Morse keys and accessories.

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: n2beg@juno.com (Douglas E. Stewart)

Subject: [11761] lay person's guide to RF

Message-ID: <19970212.051945.6998.0.n2beg@juno.com>

Hi Folks,

Cant seem to find what Im looking for in my personal library, so I thought this would be the best place to ask for ideas. I am looking for a text which can describe to a process engineer, the basic principles of RF, especially how it works in plasma generation for etching and/or sputtering (yup, you guessed it, semiconductors being made here) They don't get into RF in those fancy eastern colleges whats hands outs degreez in engrish, etc. I have a few process folks here who have asked what Its all about, and without taking a lot of time, I cant answer in a way that would mean much. (You should see the classic blank stare when I've tried) Any thoughts gratefully accepted. Tanks! (no pun intended)
73z, Doug, N2BEG qrp-1 # 850, etc...

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: ka7you@juno.com

Subject: [11820] LDG QRP Autotuner

Message-ID: <19970212.141806.6631.6.KA7YOU@juno.com>

Well I read the instruction from cover to cover, and had a few minutes to try my first (ever) toroid. The instructions are very specific, about which way to wind them. I only got it wrong once. I didn't see the slight variation needed when changing from the 2-7 turn types to the others which take up the major circumference. To get the leads to come off at the correct place, the wires need to be wrapped the opposite direction around the cores. The Instructions also say "DO NOT DROP THEM".

I got them all wound very quickly and am very pleased with the ease at which they go together. These little shiney 'bugs' were laying there on the bench with their two little legs sticking up and I reached for the instruction manual to do the transformer core. You know one of those little critters jumped up and grabbed my shirtsleeve and hung on until I moved back far enough to get him out over the concrete floor, where he let go...sure glad I have some extra T50-2 cores in the junk box. The windings slide right off the broken core. Now if I could just figure a way to slide them right back on the new one...

On to the next stage..

7 3,

Rod Johnson KA7YOU CN97AK near Issaquah, Wa. 160M thru 1296 MHz

NWQRP#120 ARCI#7251

QRP-L#844

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: "Jeff M. Gold" <JMG@tntech.edu>

Subject: [11767] LDG-tuner progress

Message-ID: <01IFBLCL75LW8WXP8R@tntech.edu>

good morning all!

well had a real bad sinus attack.. had to take 1/2 day off. After much medication and some herbal tea, was able to sit down and do a little work on the tuner.

some comments... except for the one area to the right of the board (the resistor I mentioned in earlier post), I have found it very easy to place components. The picture in the manual makes it quite easy the way it just labels the many .01s and such. I hope I got that one area correct, didn't see anyother way to put the parts in.

some notes: on my board the IN4001 (I think) wouldn't fit

through the holes on the board.. took a while to enlarge holes for the part..think I did a good job.

I followed the directions for parts placement up to installing all the diodes. After it suggests you put in all the caps. I found it easier and more desirable to do a section under each relay at a time. Think there is less likelihood of accidentally soldering in holes, or incorrect parts placement.. the parts under each relay are the same.. easier to spot the pattern. I have been checking each section with a high power magnifying glass after soldering and before cutting leads off. Looks real good so far. The plated thru holes seem to make for very good connections.

thanks again guys at LDG.. looking forward to a new life of automated tuning.. also plan on having a good manual tuner for sale in the near future :-)

72

Jeff, AC4HF

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Nick Franco <kf2ph@bnl.gov>
Subject: [11771] LIQRP Web Page and Meeting
Message-ID: <3301D7AE.398E@bnl.gov>

I wanted to get the word out before Saturday's meeting. Hit delete now if this doesn't appeal to you.

This Saturday at 11:00 am EST is the next meeting of the LIQRP Club. I added a page to the Web site which give the directions to the meeting location. Also we have been given a permanent site for our Web page. The new URL is:

<http://www.hamtrader.com/liqrp/index.htm>

Members should now bookmark this URL as our permanent home. The page is simple but gets the information out to you. Meeting information, Newsletter, and direction to each meeting will be posted here. As we grow new ideas and information can be added to the pages.

I want to thank Island Link Solutions, Inc. for providing our free permanent home for the Web site.

CU at the meeting this Saturday. Email me for a copy of the directions

if you do not have WWW access.

72,
Nick - kf2ph

--

Nicholas J. Franco <>> BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project Building 1005
Tel: (516) 344-5467 UPTON, NY 11973-5000
Fax: (516) 344-3674 Ham Call: KF2PH
Email: nickf@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: borealis@juno.com (Philip G. Collier)
Subject: [11795] MFJ 9030 Filter Mod
Message-ID: <19970212.124700.2511.1.borealis@juno.com>

A short question for anyone familiar with ladder filters. Is it feasible to modify the MFJ 9030's four pole filter to narrow the bandpass? Handbook says bandwidth does down when shunt caps are increased in value and terminating Z is lowered. So I'm considering cap replacement, but don't want to waste parts and time if it will not work...

Are there any windows, dos, or os/2 programs for designing ladder filters?

73,
Philip Collier KG2DH

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bill Todd <bill@techline.com>
Subject: [11804] MFJ Versa Tuner II 4 Sale
Message-ID: <1.5.4.32.19970212195048.0068b49c@mail.techline.com>

Hello Group(s) -

I have a MFJ-945C that I have used for about 5 years. I am willing to sell it now because of a recent purchase of a JOHNSON Matchbox tuner that works better for my QRP and occasional QRO operating.

The tuner was marketed as a "mobil" tuner because it is fairly small (about 10 inches wide and 2 inches high), and will handle up to about 350 watts. It has a single PWR/SWR meter in the middle, and uses a tapped inductance rather than a roller inductor.

The case has been scratched up a bit, and I drilled two small 1/16" holes in the underside of the case (for a mounting arrangement I used at one time) but the tuner works just fine.

I am willing to sell this for \$50.00 if there are any of you who would be interested in owning it.

Thanks - Bill-N7MFB

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dave Fifield <fifield@pacbell.net>
Subject: [11754] Modified SLV
Message-ID: <33015CA8.C5F@pacbell.net>

I got hold of one of Vern's loading coil kits at one of the recent Norcal meetings. Very well made piece of engineering! Haven't tried it on the air yet, but will very shortly.

I was just thinking.....we should call it the "SLV cubed" like this:

3
SLV

(difficult to do in ASCII, but you get the gist...)

This stands for 'St. Louis Vertical Vern's Version' of course.

Lookin' good, lookin' good!

72 de Dave Fifield, KQ6FR

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: TonyDrumm@ibm.net (Tony Drumm)
Subject: [11731] NC38S TiCK/Sidetone question
Message-ID: <199702120150.BAA12122@out2.ibm.net>

OK, folks. I've seen slightly conflicting info on how to attach the TiCK telemetry signal, but I think I can make it work.

However, I do have a question. From what I can tell, the TiCK mod leaves in

C33 and R18. What purpose do they serve at that point? I don't think they are needed for the op-amp. C32 seems somewhat superfluous, too, and the different approaches to the mod seem to attach the TiCK audio to one side or the other, if I'm reading them correctly.

Any comments?

Tony Drumm
ARS AA0SM - Rochester, MN

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
Subject: [11759] NC38s:noise reduction mod
Message-ID: <Pine.SOL.3.91.970212023837.15723A@mcmail.CIS.McMaster.CA>

Been tracking down some extraneous noise problems in the 38s. Found one that can be fixed that'll improve the noise floor significantly. Here's a quick-n-dirty (perhaps non-optimal) fix. Take out C38, the 22uf/16volt electrolytic. Re-connect it across R25, being careful to observe polarity. (+ve end goes to +8v side of R25, -ve end goes to R26). This may cause audio oscillations. If so, cut pin 8 of U5 away from the +8v bus (on the bottom of the board) and add a jumper from pin 8 to raw +12v. Don't have to do this if audio remains stable. And before you apply power, check that you haven't accidentally shorted out the 7808 with this wire jumper, else you'll blow up the 74HC240. +12v should only go to the op-amp, most other chips can't take this voltage.

Ok, here's the explanation, if you're interested:

The audio op-amp stage has high gain, something over 1000. And its input comes from the NE602 output, pin 4. This pin has an internal resistor tied to +8v line of about 1500 ohms. Turns out that the 7808 is injecting noise into the NE602's Vcc line; that's wideband audio-type noise at a mighty low driving impedance. All the filtering capacitance on this Vcc line only takes out high-frequency noise, but can't bypass the lower audio frequencies because of this low source resistance.

When U5's non-inverting inputs (pins 5, 3) are bypassed to ground, the op-amp amplifies the noise voltage to give a high noise level at its output. When U5's non-inverting inputs are bypassed to Vcc, the noise becomes a common-mode signal and is mostly rejected by the op-amp's excellent common-mode performance.

Can anyone come up with a better fix?
Perhaps this noise source can be rejected even more.

Here's a test you can do that'll convince you that the 7808 is the noisy culprit:
Bypass U3 pin 4 to ground with about 20uf. Wince, while your headphones pop. There's no noise now; the op-amp is really very quiet. Now bypass the NE602's input (U3) pin 1. Noise doesn't go away. Noise source is either a really noisy NE602, or a noisy Vcc line (its the Vcc line).
Glen VE3DNL leinwebe@mcmail.mcmaster.ca

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Richard Wilkerson <richqrp@cts.com>
Subject: [11740] need address
Message-ID: <33012788.1693@cts.com>

Can someone give me Roy's address....
Roy Gregson..... thanks..rich
--
Rich Wilkerson, WD6FDD, Santee, Ca.

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Jim Hydzik <congress@magpage.com>
Subject: [11722] Need more Canadian FSFD volunteers for Feb. 18
Message-ID: <199702112317.SAA11594@alaska.magpage.com>

Hello up North,

In case you've missed the earlier posts, we're trying to put as many of the 12 VE-land prefixes on the air on Tuesday, Feb. 18. If you have anytime at all, day or night, or both, and can help out by just calling CQ FS or WAS, please hit reply and let me know what times and frequencies YOU want to run.

It's easy, fun, and doesn't cost a dime. Let me know :)

TKS, 72, Jim K3QIO Delaware

Volunteers so far: VE3FLB/VE3JC, VE5RC (maybe VE5WF), VE7CQK.

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [11799] NorCal Meeting and Parts
Message-ID: <199702121901.TAA20596@chuck.dallas.sgi.com>

Gang,

As most of us usually do and I know you do, you just probably won't admit it, when we go to Dayton, NorCal, AZ, NJ, NE, NW, and all the other meetings there is always someone there who has parts.

I was thinking, here are some of the reasons why people give up ownership of parts:

1. They are old and were bought at one time for a "project" that never got done or became rapidly obsolete or forgotten.
2. Someone gave them to the individual as a 'gift' or 'maybe you can find a use for this'.
3. They got them at a surplus sale along with a ton of other stuff.
4. They got too many of these anyway.

.... and the list goes on and on.

And these guys and girls know that there are individuals like me that have a \$5 or \$10 bill in the pocket that has their name on it. :-)

Lee Stanford KM6LA at the NorCal meeting had a bag of 2N2222a metal case transistors and was selling them at a very good price. Two things - they had a bright blue dot marked on the top with a marker and they had the short leads with curve like used for auto-insertion equipment.

Hey, the price is right. I know that just about every rig I have and will ever have has a 2N2222 in it. Heaven forbid that one should ever ever fail and I'm without a spare (not that I

don't have any spares already). At a dime a piece how can I go wrong. Why they are \$0.16 mail order. :-) A guy could go broke....

So when I get home and over the weekend out comes the old Heathkit transistor and FET checker. OK, haven't used this thing in 10 years, where is the manual. OH, there it is on the bookshelf. OK, charge up two D nicads to power it. Now is that an NPN or PNP for a 2N2222? You can tell you are a dweeb when you don't have to look it up. ;-)

Wow, gain of 220 just like the Motorola manual says it should be. DC of course. Looks good. Lee the critters are good. I'll let you know when I'm gonna be at the next meeting. I'm always looking for good deals. Like when I walked into Woolworth's in Santa Fe, NM and there on display were bottles of clear fingernail polish for \$1 each. I told the sales lady that I really had let my nails go too long and they were such a mess and I really had to have two bottles. Phyllis was hiding a couple of isles over not wanting anyone to know who she was with.

So, once again, another good deal. Now, let's see - airfare, rent-a-car, meals and lodging maybe I better re-think this thing..... Nah. Seeing the gang was worth it.

I'm sure that all of you have noted that when something comes up for sale on this group it does seem to sell in about 30 minutes or less. We do seem to have the same addiction. :-)

SIG

Chuck Adams K5FO adams@sgi.com DXCC=8
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Ken Freedman <n1qqv@cshore.com>
Subject: [11777] Parabolic Antennae
Message-ID: <2.2.32.19970212152418.00698960@cshore.com>

Would anyone with experience constructing feeds for dish antennas at VHF/UHF freqs please email me privately?

TNX and 73, Ken

Ken Freedman

AKA: N1QQV/QRP VE, EC Madison CT, QRP-L
Living Proof That, "You don't have to be a blonde to be light headed!"

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: mrice@mindscape.com
Subject: [11730] QRP Data Book
Message-ID: <9701118557.AA855711997@smtpgate.mindscape.com>

In my haste to delete an old message, I also deleted the post with the two addresses for the QRP Data Book and all the associated info.

Would one of you fine gents resend that to me?

Thanks in advance! The push for code learning is on...

Mike

SIG

"Sometimes you have to drink with a big straw."

C. Mike Rice KB0NND

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Floyd Smithberg <floydnq7x@worldnet.att.net>
Subject: [11810] R/S Solder Sucker Sale
Message-ID: <19970212203303.AAA4683@LOCALNAME>

The Shack has their 45W desoldering tool on sale at 1/2 price!! Now only \$4.99...best method of removing parts from pc boards I've found and you can't beat that price. I just bought a spare. Has replaceable tips for @1.29. Mouser has one...looks same for \$73. Try it you'll like it :-)
Floyd NQ7X Phoenix ScQRPion dm33uq
ARCI G-QRP NORCAL ARRL

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Owen Quarles <k1oj@swbell.net>
Subject: [11787] Rain-Flu-DX
Message-ID: <3301F1E9.3815@swbell.net>

Howdy from Texas!
It is cold and rainy here...:-(bad
I have the flu.....:-(very bad
I took the day off.....:-(good
I am drinking my OJ and tuning the hf bands.....:-(good
I worked 9a50d on 20m...dj1ks on 20m...v5/w8uvz on 15m...pj9/k7ni on
15m....all qrp with a butternut ant.....:-(very good
Just some of life's little ups and downs.....
CU---OJ---K10J
HOUSTON, TX
QRP-L #732

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Conard Murray <ws4s@InfoAve.Net>
Subject: [11778] RS 1/8 inch plug warning
Message-ID: <2.2.32.19970212154142.00b38130@infoave.net>

Hi everyone,
I had to tell everyone about this. I am the proud owner of an Alinco DX-70T
thanks to a list member. Anyway, the badgers managed to trade my whole stash
of 1/8 inch key plugs for RCA connectors, so I headed to RS to buy a pair of
1/8 inch plugs.
I was talking with a local on 10 SSB while I carefully wired up a new key
cable out of some nifty RG-174-sized coax I found with a teflon center
insulator. I hooked it to the key, plugged it in and switched to CW and the
rig just keyed up. Unplugging the cable unkeyed the rig. I checked
everything and it looked OK ... was fairly certain I didn't melt the teflon!
The only possibility was a shorted plug and sure enough, both plugs in the
blister pack are dead shorted.
I don't need this sort of excitement! I wonder how many of the other plugs
RS has on the shelf are that way?
Guess it pays to check ALL components before using them!
72,
Conard

.....
. Conard Murray WS4S Glowbugs listowner .
. 217 Dyer Avenue ws4s@infoave.net .
. Cookeville, TN 38501 615-526-4093 .
. <>< Wise men still seek Him ><> .
. QRP-L # 993 .
.....

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Steve Hurst" <shurst@magiclink.com>
Subject: [11753] Thanks Paul !!!!!
Message-ID: <199702120709.CAA49437@nss2.CC.Lehigh.EDU>

Thanks Paul

Appreciate It !!!

73,
Steve
KA7NOC
di dit

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bob Hightower <ki7mn@dancris.com>
Subject: [11776] Tuesday FSFD Special Guests
Message-ID: <199702121508.IAA05972@dancris.com>

Well, didn't get to work either of the special guests last night, though I tried to catch Chuck at about 0430, but no luck.

I did, however, along with Joe AB7TT, Floyd NQ7X, Mike NQ7K, Dan KK7BD and Brian W5VB0, have a chance to meet with Randy WJ4P and see his 'championship' Forty-niner, along with some other goodies he had.

Had a nice visit, and we all had a great time. Good to see Randy out here. If any others on the list have a chance to come to the Phoenix area, let us know, and we'll plan a time to meet and chat.

73,
Bob KI7MN Chandler, AZ Grid DM43bi Lat 33.334500 Long -111.87260
NorCal #1221 ARCI #8918 Qrp-1 #271 CQC #274 AK QRP #30 ARRL
<http://www.dancris.com/~ki7mn>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Scott Bauer <ke3nv@erols.com>
Subject: [11752] V5/ZS6YG, Good catch
Message-ID: <199702120705.CAA06166@smtp1.erols.com>

Talk about lucky!!!! Worked V5/ZS6YG at 0531 with 3 watts this morning. I also heard Harvey/ N6MM work him around 0650 or so.

40 meters is very quiet, but working great for us QRPers!
Good catch Harvey :-) QSL mgr is KY0A
72&73 de Scott Bauer W3CV, Odenton, MD. grid FM19. Formerly KE3NV
Fists 1502 QRP Nut SWL Truck Pilot ARRL
Current QRP rigs: Green MTN 15 & 17, HW-8, G-QRP GQ-40
S&S Eng ARK-20, ARK-30, ARK-40, TAC1-80, all Sensational rigs.
38 special at 300mw

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Lau, Zack, W1VT" <zlau@arrl.org>
Subject: [11773] Voltage regulation principles
Message-ID: <m0vug7p-0004ohC@mgate.arrl.org>

You can buy micropower regulators designed for powering
5 volt ICs off 9V batteries for very long periods of time. Check
the latest Maxim and National Semiconductor catalogs
for the best products--what I used is probably obsolete
by now. Oh yeah, don't forget to investigate the required
bypass capacitors--often they aren't optional.-- Zack Lau W1VT

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Jim Hydzik <congress@magpage.com>
Subject: [11721] W1EAT-Vermont read this only 4 FSFD
Message-ID: <199702112317.SAA11610@alaska.magpage.com>

Hi Tom...W1EAT

I must have an older e-mail address for you. We're putting tha FSFD
schedule together and could use the times and frequencies you want to run on
Friday, Feb. 14. Let me know and I'll collate the info and post to the
reflector from here.

Hope to work you myself :) TKS, Jim K3QIO Delaware

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Gary M. - W2UX" <MAIL4GARY@worldnet.att.net>
Subject: [11734] W5XE W5XE W5XE DE W2UX
Message-ID: <19970212020802.AAB21156@LOCALNAME>

Sorry Ray...had a computer melt down and lost all EMAIL addresses. Got the package and many thanks. Not perfect...but good enough so I can see what is going on. Can I send you some cash for your expenses??

Thanks again.

73/72

Gary - W2UX

QRP-ARCI # 8911 QRP-L # 593

CW is THE REAL THING.

Lexington, SC EX: WA2UAX

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: Ed Tanton <n4xy@avana.net>

Subject: [11724] Re: 102 ft dipole on 30m

Message-ID: <3.0.32.19970211192154.00985350@tiger.avana.net>

Hi Cecil... ABSOLUTELY... I tried off and on for years to get several G5RVs to work on 30M and was never able to do it successfully until using 100% Belden KW twinlead all the way to my Nye MB-V-A. When there was a Bencher (air-wound) balun at the usual G5RV feedpoint, I could load the thing but it got out so poorly and the tuning was so sharp that I suspect I was loading mostly the balun. It still does not get out very well, but is better than nothing-barely. I have a Cushcraft R-7000, the GAP-whatever-it-is equiv., and the Hygain DX-77 I had planned to try and compare. Time etc. stalled that project, but if I can get just ONE of them up on a 15 ft. tripod on my lower roof (probable TOTAL incl. mast 40 ft. at base) I'm gonna put the Bencher balun back onto the G5RV (after putting the line length back to the appropriate value) and raise the son of a gun back up to a decent height, and forget about 30M on it! (I lost a G5RV / year for 3-4 years, despite some very ELABORATE measures, because of my trees managing to-sooner or later during a thunderstorm-whip in opposite directions. Believe me I tried everything!) Anyway, I'm just going to put it back up each time because at its present 'safe' 25-30 feet it does not get out worth a darn-and what good is that! At 45-55 feet it performed very well indeed for nothing more than a dipole.

72/73

Ed Tanton N4XY EMAIL: n4xy@avana.net TEL: (770)579-3933 V/MBX/FAX
189 Pioneer Trail
Marietta, GA 30068-3466

QRP-ARCI#7663	G-QRP#6779	OK-QRP#172	QRP-L#758	AdvRC#140
NORCAL#1779	NCDXF	SEDXC		

Life Member: ARRL AMSAT IDRA INDEXA QCWA
URL: Coming Sooner or Later

"Think you can, think you can't: either way you're right!" Henry Ford

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>
Subject: [11726] Re: 38s additional filtering?
Message-ID: <1.5.4.16.19970212004611.25271d8c@mail49.mci2000.com>

At 12:56 AM 2/11/97 -0500, you wrote:

>Has anyone added the additional i.f. filtering to the 38s? Reports?
>

> -----
> Rich Dailey - KA8OKH <ka8okh@som-uky.campus.mci.net>
> qrp-l #933 ars #223
> If you push something hard enough, it will fall over - Fudd's law
> -----
>

Rich...several of us are working on something, but none of us
has anything that we want to put forward yet. Stay tuned, some
of the best (oh? deranged maybe) minds on this list are working on it!

72....Jim

Jim Kortge, K8IQY (ex NU8N)		BMHA, NorCal, QRP-L
jokortge@tir.com	__o	Cascade 17/40 SSB
Fenton, MI	_`\<,	Mizuho 17/40 SSB
... 	(*)/(*)	

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Lee Richey" <lee@radioadv.com>
Subject: [11806] Re: 38S thumping Continued
Message-ID: <199702122009.PAA74149@nss2.CC.Lehigh.EDU>

>
> As Dave has stated , it appears that the
> thumper is inherant with the 4066. I started re-thinking the
> whole problem.
>

I don't have a 38s so I may be speaking out of turn here.
That said, I doubt that the 4066 is the problem. I have used
the 4066 in numerous low level applications for more years

that I care to admit and find it to be an excellent switch. I'll bet the problem is elsewhere.

If the sidetone is being generated by logic circuits, I think you will find that the thump is coming from the DC shift that occurs as the sidetone is being turned on and off.

Consider this. When the sidetone is off, the output of the sidetone generator is zero (or Vcc). When the sidetone generator is turned on, it is switching between zero and Vcc at an audio rate. If the duty cycle is 50%, the average output is 1/2 Vcc. The shift from zero to 1/2 Vcc back to zero when the sidetone is turned on and off, has a time constant that is determined by circuit constants and which is likely to make the DC shift audible as a thump.

There are ways to eliminate this shift by careful design.

-Lee-

<http://www.radioadv.com>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Bradley S. Mitchell" <bmitchel@kodak.com>
Subject: [11824] Re: 38S thumping Continued
Message-ID: <33031839.4D18@kodak.com>

A little history on what I have done:
Removed the 74HC240,
TiCK, (sidetone), Both NE-602's still thumping.
Only thing left is the switch, and the audio amp chain.

Lee Richey wrote:

>
> >
> > As Dave has stated , it appears that the
> > thumper is inherant with the 4066. I started re-thinking the
> > whole problem.
> >
>
> I don't have a 38s so I may be speaking out of turn here.
> That said, I doubt that the 4066 is the problem. I have used
> the 4066 in numerous low level applications for more years
> that I care to admit and find it to be an excellent switch. I'll
> bet the problem is elsewhere.

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dave Sjolín <sjolin@swbell.net>
Subject: [11814] Re: agreements
Message-ID: <33015D23.7E51@swbell.net>

Jim W7LS wrote:

>
> Hi, Ed. I agree that frequency policemen hack me off, too. Since you have
> done RTTY for years, you obviously know where the RTTY action is. You must
> know that 7040 is not a usual freq for RTTY. Why do you want to do RTTY in
> such an unusual place?

Jim, no offense but in most of the world, RTTY operations take place between 7030 and 7040. For example, throughout Europe, RTTY is not allowed and would be fruitless up where we operate here in the states because European phone band is between 7050 and 7100. Rest of 40 meters is pretty much worthless to them due to International broadcasting which "shares" the band.

During RTTY contests, many of the 40 meter contacts between the US and Europe and Africa occur around 7040. It can't be too "unusual" a frequency. K3MM was the station on 7040 Sunday afternoon and he is apparently the winner of last weekend's contest, with more than 1200 QSOs. If he was so far from normal RTTY frequencies he would not have made more than 500 of these on forty meters.

73 de Dave, N0IT

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Len W. Touth" <len@infinet.com>
Subject: [11772] Re: AT-11 auto-tuner
Message-ID: <199702121456.JAA10496@mail1.infinet.com>

Here here!
Well done Scott.

I built the QRP version *without* any case. Yep, lots of work to prepare a case for this tuner. This time, I splurged for the case. Best extra money I ever spent.

Best 72/3

Len

KG8SF

len@infinet.com

kg8sf@key.com

QRP-L # 841

CQrp # 2

ARCI # 9025

FISTS # 2134

CHARTER MEMBER - THE COLUMBUS QRP CLUB - CQrp

Web Page: <http://www.infinet.com/~len>

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>

Subject: [11783] Re: AT-11 QRP

Message-ID: <Pine.3.89.9702121022.F3815-01000000@w3eax.umd.edu>

cool - can't wait to build mine.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

On Wed, 12 Feb 1997, Mike Robinson wrote:

>

> If you'd like to see the finished AT-11 QRP

> in the enclosure:

>

> <http://www.frii.com/~michael/amateur.html>

>

> Yes that is a 3.5" floppy sitting on top of it.

>

>

> =====

> 7.3 de Michael N7MR miker@cc.com michael@frii.com

> <http://www.frii.com/~michael>

> QRP-L #126 Norcal #857 CQC #180

> =====

>

>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: DYARNES@aol.com
Subject: [11742] Re: auto tuner
Message-ID: <970212004520_411549833@emout11.mail.aol.com>

In a message dated 97-02-10 14:53:51 EST, JMG@tntech.edu (Jeff M. Gold) writes:

<< I found it extremely hard to read the silk screening on the board. I even used a magnifying glass and my eyeglasses. >>

Hi Jeff and All,

I just got my kit in today's mail. After reading your comments I looked the board over, and I have to agree with you. It does not seem to be very clearly marked in many instances. Hope it turns out to be an easy board to work with.

It's too bad all boards can't be as good as the NorCal and Wilderness boards seem to be. There may be better boards out there, but I haven't seen them!

72 de David W7AQK

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dan Hogan <dhhogan@lightside.com>
Subject: [11808] Re: Can you hear me?
Message-ID: <3.0.16.19970212122324.2687dbd6@mail.lightside.com>

Brent:

For 40 meters use a dipole. Even 33 feet of hook up wire from the pin and 33 feet from the ground, as a counterpoise, of the connector will work. At least it did for me until I put up my Tri-Loop.

Give me a time, date and frequency and I'll listen for you.

72/73

Dan Hogan WA6PBY QRP-L #558, CQC #340, NorCal #1806,
dhhogan@lightside.com ARRL, ARCI #3847, G-QRP #9533
Lat. 34d 03.5'N Lon. 117d 56.0'W Grid: OM84wc

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Gary R. Widmayer" <grwidma@edcen.ehhs.cmich.edu>
Subject: [11829] Re: Can you hear me?
Message-ID: <330253C9.60B3@edcen.ehhs.cmich.edu>

Brent, a Ham Stick on the floor without a ground plane is very close to a dummy load, I know I have run many tests on my Ham Sticks on both the car, van, on the ground, and with one ground wire abt 12' long in the back yard.

Ham Sticks work vy well if on a large car or van, but they don't work very well without a ground of any type (just like most verticals). Even the dipole setup with two Ham Sticks end to end isn't very effective in my radio operating.

Best to run a few ground wires off the sides of the Ham Stick and I will bet your contacts will improve.

Gary/N8AYY

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: okasb@rex.mtv.gtegsc.com (Bob Okas)
Subject: [11728] Re: CMOS 111 for negative keying.....HELP
Message-ID: <9702120135.AA24929@rex.mtv.gtegsc.com>

Hi,

I finally caved in with my CMOS II keyer and tossed in a small 5V reed relay. Now it'll key just about any solid- or hollow-state rig with impunity. Just observe the relay's contact ratings. If you prefer the solid-state approach, there was a hint/kink/technical correspondence in QST several years ago that illustrated how a pair of transistors could key both positive and negative-keyed rigs without any changes. FWIW, the FT-101 uses tubes only in the driver and final stages, so I suspect the grid-block keying you allude to has been taken care of. Of course, it's easy to measure the keying voltage...

Good Luck,
Bob - W3CD

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: Steve Ellington <n4lq@iglou.com>
Subject: Re: Embedded Research

I did an Alta Vista search and came up with nothing.
Can someone post the URL for Embedded Research please.

n4lq@iglou.com 73

--

FAQ on WWW: <http://www.contesting.com/TenTecFAQ.html>
Submissions: tentec@contesting.com
Administrative requests: tentec-REQUEST@contesting.com
Problems: w9tw@contesting.com
Sponsored by: Akorn Access, Inc & N4VJ / K4AAA

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: dwink@juno.com (Daniel C Winkler)
Subject: [11770] Re: FYBO: Thermometers
Message-ID: <19970212.063958.19719.1.DWink@juno.com>

On Mon, 10 Feb 1997, Joe Gervais wrote:

>

> OK, you can't FYBO properly without a thermometer sitting
> next to your keyer.

You know, it occurs to me that you guys forgot a multiplier for precipitation. Up here in the glorious Pacific Northwest you can be in the Western lowlands in winter and the temp may not be so bad (mid-40s), but it will be RAINING. Frankly, for misery and danger, cold blowing rain is a LOT worse than mere snow or calm sub-zero temperatures, where water remains in the solid phase.

So how might we account for this? If one merely goes out in one's Winnebago, runs out the awning, puts out a table and chair for the op position, life isn't too tough. But if you have to set up a tent to operate in IN THE RAIN, why that oughtta be worth a bunch of multiplier points.

How about a "I was wet" multiplier? 10% of the time = x1; 33% of the time x2, 66% of the time and had to change clothes at least once, x3 ; 100% of the time, is x 1/2 (for stupidity). Guys who spill their ice tea on themselves by the pool are not eligible for "wet" bonus multiplier!

I'm working that Saturday, so the best I could hope for would be an hour or so at the tail end. Perhaps I'll go out in the yard, throw up a wire, and get wet for a while.

73, ; D DWink@Juno.com Dan Winkler N7IVR Seattle, WA
-----whom the gods would destroy, they first make proud -----

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Joe Gervais <vole@primenet.com>
Subject: [11790] Re: FYB0: Thermometers
Message-ID: <199702121647.JAA24676@usr03.primenet.com>

Stephen (AB7HI) wrote:

> There is a cold place in Arizona, a town called Maverick. Back
> when it was just the lower 48 on the flag, Arizona often
> had the low and high temp in the nation on the same day.
> ...
> Any o' you zonies know what temperature it was in Maverick
> today??? Cheers all.

I thought we sold Maverick to New Mexico to pay for that new Diamondback stadium... :-)

'Course as Stephen knows, if you *really* want cold wx here in AZ, you climb Humphreys Peak near Flagstaff. At 12,600+ feet, you'll find all the temp multi's you never wanted to experience. :-) Scorching hot, freezing cold - man, I LOVE this state!

Cheers de AB7TT (ex-KC7NEV),

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

10 Days to FYB0!!!

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Joe Gervais <vole@primenet.com>
Subject: [11793] Re: FYB0: Thermometers
Message-ID: <199702121703.KAA25388@usr03.primenet.com>

Dan (N7IVR) wrote:

> You know, it occurs to me that you guys forgot a multiplier for
> precipitation. Up here in the glorious Pacific Northwest you can be in
> the Western lowlands in winter and the temp may not be so bad (mid-40s),
> but it will be RAINING. Frankly, for misery and danger, cold blowing
> rain is a LOT worse than mere snow or calm sub-zero temperatures,

Wait a sec, I thought all you folks in the Great Wet
North had already evolved air-permeable water-tight
frog skin. Wouldn't that be like giving a fish a
multiplier for having to swim? :-)

But take heart, the "Saddest WX Tale" is an official
prize category now. Take a picture and tell us why your
FYBO wx sucked more than anyone else's, and you'll win a
40-9er. And maybe a relocation package from the Phoenix
chamber of commerce. :-)

Cheers de AB7TT (ex-KC7NEV),

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Allen Jones <ajones@adsnet.com>
Subject: [11769] Re: Help! I need Dayton rooming
Message-ID: <1.5.4.32.19970212142852.00699b04@adsnet.com>

At 10:30 PM 2/11/97 -0800, you wrote:

>Greetings folks, as Myron has been mostly out-of-touch (health problems
>as I understand), I am in desperate search for a roomy or a room for
>dayton. Any pointers appreciated...the local norcal group can verify
>that I don't stink or anything (at least I think they will verify
>that...the smelly is always the last to know...).
>
>73 de dave, n9uxu

Dave . . . I was able to get reservations Monday at the Knights Inn in
Miamisburg (Byers Rd.) for my wife and I. I don't think it is too far away
from the Days Inn South. Rooms were \$50 per evening double occupancy. Don't
know the phone # offhand but you should be able to check with a local
Knights Inn.

Good luck.

Allen Jones, W9DZ
Michigan City, IN
ajones@adsnet.com

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Dean T. Miller" <dtmiller@dsmsnet.com>
Subject: [11815] Re: High-Capacity NiCad Batteries
Message-ID: <9702122132.AA06401@dsms7.dsmsnet.com>

Hi Ori,

At 11:41 AM 2/12/97 EST, Ori K Mizrahi-Shalom wrote:

>

>A fellow ham found a new type of rechargeable batteries. He checked them
>on his H-T and got about double the talk-time of the standard cells he
>was using.

>

>Manufacturer: Panasonic
>Type: AA, High-Capacity NiCad
>Terminal voltage: 1.2V
>Capacity: 1100 mA-H
>Price: \$15 for 4 batteries and a charger
> (at Price-Costco)

>

>For a reference, other AA-type batteries offer the following:

>

>Alkaline: 1.5V/2400 mA-H
>recharg. Alkaline: 1.5V/1300 mA-H, 25 charges, capacity after 10 charges
>standard NiCad: 1.2V/600 mA-H, 300+ charges

Hmm. Just off-hand, it looks like the rechargeable alkalines might be the better bet. But then, I'm not too fond of NiCads because of their memory.

Dean -- from Des Moines (KB0ZDF)

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [11816] Re: High-Capacity NiCad Batteries
Message-ID: <Roam.3.0.1.855784183.460.myers@bigboy>

Dean Miller wrote:

> >For a reference, other AA-type batteries offer the following:
> >
> >Alkaline: 1.5V/2400 mA-H
> >recharg. Alkaline: 1.5V/1300 mA-H, 25 charges, capacity after 10 charges
> >standard NiCad: 1.2V/600 mA-H, 300+ charges
>
> Hmm. Just off-hand, it looks like the rechargable alkalines might be the
> better bet. But then, I'm not too fond of NiCads because of their memory.
>
> Dean -- from Des Moines (KB0ZDF)

My experience has been the rechargable alkalines have a much higher internal impedance than nicads - the battery voltage drops more than nicads for a given load.

Dana K6JQ
Dana@Source.Net

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: wmcshan@REX.RE.uokhsc.edu (Mike McShan)
Subject: [11817] Re: High-Capacity NiCad Batteries
Message-ID: <v01540b04af27eab969ca@[157.142.56.167]>

>>For a reference, other AA-type batteries offer the following:
>>
>>Alkaline: 1.5V/2400 mA-H
>>recharg. Alkaline: 1.5V/1300 mA-H, 25 charges, capacity after 10 charges
>>standard NiCad: 1.2V/600 mA-H, 300+ charges
>
>Hmm. Just off-hand, it looks like the rechargable alkalines might be the
>better bet. But then, I'm not too fond of NiCads because of their memory.
>
>Dean -- from Des Moines (KB0ZDF)

I have used the rechargable alkalines and was not overly impressed. After 10 charges, their performance rapidly degraded, and after about 20 charges, they were usually worthless. I was using them in an Apple Newton that drew about 800 mA, and these batteries were definitely poorer in performance than ordinary alkalines or nicads - more reboots and system instabilities. I think that rechargable alkalines might prove to be a poor choice for a high current device like a transmitter.

Mike N5JKY
Edmond, OK

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: James Parsons <k5rov1@worldnet.att.net>
Subject: [11764] Re: HW-8/Tick-1
Message-ID: <1.5.4.32.19970212131547.0066dc38@204.127.3.1>

At 06:25 PM 2/11/97 +0000, you wrote:

>Hi Jim,

>

>thanks for the post on installing a TICK into a HW8. think I will put
>one in my HW8 also.

>

>73, mike

>

Mike, I found that if you run the audio output of the TiCK-1 through a .01 capacitor to the white lead on the selectivity switch of the HW-8, you will get much better audio than you will from the transducer. I am a bit hard of hearing, and the transducer was just too hard for me to hear. You will get lots of audio using this method, and it sounds much better. Also, it saves needing, and having to mount the transducer. Remember, I am using just 3 volts on the keyer. If you use more, you may need less audio to the selectivity switch. I have not tried it with more voltage.

73,

Jim, K5ROV

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [11797] Re: Intruding Numbers Station near 10.130
Message-ID: <Roam.3.0.1.855770235.11009.myers@bigboy>

Philip KG2DH wrote:

> Has anyone noticed the numbers station near 10.130MHz sending 5 figure
> groups? It was on thin morning between about 1335 to 1346 GMT, booming
> into upstate New York. There didn't seem to be any audible amateur sigs
> on the band then, and the RTTY station was barely audible here.

>

> I tried tellin' em to move off with that crypto stuff, but I just
> couldn't take the frequency with my couple of watts <g>...

A couple of comments:

#1. 30m is a shared allocation, just because we hear some obviously non-amateur activity doesn't mean we have priority. In fact, we may be compelled to avoid interference in some cases.

#2. Numbers stations. You're almost certainly better off not messing with them in any way. I've spoken to people that have DFed them to the source, and I doubt any of us would be keen to repeat the experience these folks had.

As long as they're an annoyance, it is really no big deal ;-)

Dana K6JQ
Dana@Source.Net

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [11801] Re: Intruding Numbers Station near 10.130
Message-ID: <199702121907.TAA20620@chuck.dallas.sgi.com>

Phil et.al.,

Be careful on 30M. We share the band with a number of other services. If they are doing crypto, don't bother them. You don't want to know. :-)

SIG

Chuck Adams K5FO adams@sgi.com DXCC=8
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Laura" <sputnik@imt.net>
Subject: [11830] Re: Intruding Numbers Station near 10.130
Message-ID: <199702122356.QAA24714@cu.imt.net>

" and I doubt any of us would be keen to repeat the experience these folks had."

You've got me curious! What happened to those that DFed them? Was it like the burmuda triangle or more like Jeffery Dahmer's apartment?

Laura
KJ7UN

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Richard Wilkerson <richqrp@cts.com>
Subject: [11739] Re: IRF 510'S ON SPECIAL
Message-ID: <3301273C.3EBF@cts.com>

Jerry Parker wrote:

>
> Dan of Dan's Small Parts and kits has just put IRF 510's on special at
>
> 5 for \$4.50!
>
> Check his specials page out.
>
> <http://www.fix.net/dans.html>
>
> Enjoy,,,Jerry...K
> Jerry ... WA6OWR ... K
>
> The NorCal Page
>
> <http://www.fix.net/norcal.html>

The way Iam popping them I had better get a few!!!!!!
--
Rich Wilkerson, WD6FDD, Santee, Ca.

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [11736] Re: k5fo contact
Message-ID: <199702120222.CAA19111@chuck.dallas.sgi.com>

Jim,

Good to work you too. I tune across 30M when I get home now to listen to all the weak signals and chirpy (:-) ones. I worked 3 2xQRP contacts in a row doing that, but only one 38S and that was yours.

Now if I could only get a QSO on 40M. Be calling CQ for 45minutes.

Will be in the neighborhood of 7.040 until 0530UTC. Band is
deader than I've heard it in a long long time. Guess the solar
burst killed it deader than Neil's badgers after New Year's Eve.

CQ CQ CQ DE K5FO K5FO K5FO/QRP K

..

SIG

Chuck Adams K5FO adams@sgi.com DXCC=8
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>
Subject: [11768] RE: lay person's guide to RF
Message-ID: <37353.owen@piper.eeel.nist.gov>

In message Wed, 12 Feb 1997 05:16:13 EST,
n2beg@juno.com (Douglas E. Stewart) writes:

> Hi Folks,
> Cant seem to find what Im looking for in my personal library, so I
> thought this would be the best place to ask for ideas. I am looking for
> a text which can describe to a process engineer, the basic principles of
> RF,

Doug you might try "The Penton Institute" book store. Their web site is
<http://www.penton.com> and address is 1100 Superior Ave. Cleveland, Ohio
44114-2543 1-800-223-9150 They have some nice books including one I'm
thinking of buying "HF Communications: A systems approach". Maybe a search
of their WEB site will come up with an RF book like you desire.
72 Jim K4CGY qrp-1 #72

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: DYARNES@aol.com
Subject: [11743] Re: Logging programs
Message-ID: <970212004521_474394249@emout12.mail.aol.com>

I'm planning on using a VERY nifty logging program on my Psion 3a created by
Bob, W03B. If any of you out there are "lucky" enough to have snagged one of
these little gem hand-held computers, and if you don't have a logging program
to use on it, give Bob a shout. You will be impressed!

72 de David W7AQK

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: JCoote@aol.com
Subject: [11798] Re: mobile qrp
Message-ID: <970212134312_-1274548282@emout05.mail.aol.com>

In a message dated 97-02-10 16:30:42 EST, jdenison@aisp.net (JOEL DENISON) writes:

>
> Just a short story. I had an icom 735 in my truck, (back in
>louisiana) and did some county hunting mobile as some spots in La. are hard
>to get. Wel one night I was on my way back from a friends house and I put
>the power down to 5w and sent out a cw just wondering what would happen.
> I got an immediate reply from a VE running less than five watts. I
>had an iambic key mounted on a board that allowed me ease of use and I found
>I made "many" qrp contacts mobile cw. It's a blast and safe if you set up
>your key (and a pad to copy call signs and names in the right place. no need
>to get your eyes off the road for more than a second or two if you forget
>the call sign or name.
> It also helps one to learn how to copy in one's head faster. If
>you're mobile give it a try (but not in heavy traffic) be careful and use
>common sense and I gurantee you will have a blast.
>
>God Bless
>Joel
>
>WA5CVM
>Joel Denison Gentle Lady (049 - high start)
>81 High street 40 mtr dipole up 40ft
>Farmington, Maine 04938 QRP ARCI 4066 NEW ENGLAND QRP 476 QRP-L 765
>jdenison@aisp.net AK/QRP 109
>

Joel & Group,

I've also done a little mobile CW with an IC-735/AH2 (tuner) combination in my fullsize van. It can be a lot of fun. It helps to let your contact know you're mobile ASAP so the contact understands if you have to AS (wait) while doing a little driving in the meantime. I've done this on Los Angeles freeways and survived. Earphones (though supposedly illegal in my state) aid concentration on the CW and on the road. Military knee-pad or knee-clip keys, or velcroing the key base to a driver seat arm rest may add comfort.

73, Jay
W6CJ

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [11805] Re: Modified SLV
Message-ID: <199702121958.MAA16566@zia.aoc.nrao.edu>

Either that, or call the W6MMA mod version the SLV/MMA.

The MMA could also stand for Modified Monopole Antenna
 ^ ^ ^

: -)

Paul NA5N

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: okasb@rex.mtv.gtegsc.com (Bob Okas)
Subject: [11821] Re: NC38s:noise reduction mod
Message-ID: <9702122223.AA02786@rex.mtv.gtegsc.com>

Glen and the Gang,

I have experienced the very same problem with the very same components, but with the NorCal Cascade!. The 7808 is a noisy part, with typically 40-50 uV of wideband noise appearing on the output. In my experience, some parts are lower noise than others. My solution for the Cascade was to install socket pins at the 78L08 regulator site and hand select the quietest part.

One trick analog designers use is to filter the power supply inputs to each device. For opamps, which already have decent power supply rejection characteristics, the rule of thumb is a 100 Ohm resistor in series with the supply lead and a 0.01-0.1uF cap to ground at the device. Such a technique might be applied here.

The NE602's are spec'ed for a maximum supply voltage of 8.0V, so they're being run at the limit. I've found some 602's that get pretty noisy with this supply voltage. A noise reduction approach would be to cut the supply traces at pin 8 of the NE602's and install a 470 Ohm resistor in series with the 8v supply. Make sure there are 0.1 uF caps at pin 8 of each IC. This does two things: 1.) It lowpass filters the power supply (3400 Hz corner

frequency) 2.) It reduces the supply voltage at pin 8 to about 6.5V. Tacking a 10 uF electrolytic at each 602 would take care of any low frequency noise.

Since my 38s is just about ready for initial checkout, I haven't tried these mods yet (any volunteers?). If mine turns out to be noisy, I'll try the mods and report my findings.

Bob - W3CD

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [11819] Re: NorCal Meeting and Parts
Message-ID: <Pine.SUN.3.90.970212140554.6864A-100000@vortex.sage.dri.edu>

Hi Chuck et al,

The good ole' 2N2222A just saved me lots of work here at work!

Had a counter line that was held HI, (5vdc), and would count each time it was pulled low.

I have a device that I have to count that puts a 5vdc sig, (TTL), each event.

Now we all know that we can't see a 5 volt sig on a 5 volt line, but I used a little 2N2222A, in it's little metal can, put a 1K resistor in the base lead and bingo.....I now pull that one line low when the other goes high and it all mounts on the back of the DB25!

Yessiree, just grabbed one of them thare critters outta the bag and was home free!

Without a well stocked junk box a fellow just can't do anything, even at work!

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: john andrews <jm165723@eee.org>
Subject: [11823] Re: NorCal Meeting and Parts
Message-ID: <330243C5.8F4@eee.org>

Hi Chuck;

Know JUST what you mean. I'm buried in the stuff. The other side of the coin, however, is:

I've tried from time to time to *give* stuff away. Can't be done. I still have sets of the coils for the "Tuna-Tin2" 40m. transmitter that Doug got permission from ARRL/QST to reprint in QRPp. (BTW- you seem to have cornered the market on the "finals" for this neat rig :-).

I did give a few sets away with a few responses like:

1. "What's an S.A.S.E?"
2. " You bettcha! Hold a set for me!"....E-mail 2 weeks later sez"Well.. Really just don't have time....Sorry."

Not pointing my finger....perish the thought.... One fella asked for parts for a HW-100. He sent me \$3.00 for postage *months* ago. Found it behind a very heavy tool box yesterday with the shipping label, ready to go. Thought I sent it out. Old Timers Disease.

Found a couple of regen receiver boards that look like fun. Gonna offer these for sale somewhere around the end of the month.

Collected up a bunch of gas-discharge static suppressors at the last swap-meet. Never did explain these darn things well. Gary Coffman posted a great article on the Ham-Homebrew list. Gonna try to drop him a line and ask for permission to relay the info on. I remember the-"Did I mention about the static here?" posts you guys sent(along with the "winds" message :-).

Got boards I promised to send out. Ooops. Not drilled. Got drill bits and Dremel. Now can't find boards.

Found 20 surplus 6.8 uH mini-chokes. Lost 'em in 5 minutes.

Found several 100uA meters.New. Anybody need a nice 4 1/2" meter? Did'nt think so.

Gotta get a life.
72, John- N5INZ

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Bob Patten <n4bp@shadow.net>
Subject: [11751] Re: Recvied Power Supply
Message-ID: <Pine.SOL.3.91.970212020648.12743A-100000@hyper>

On Tue, 11 Feb 1997, WILLIAM A STIETENROTH wrote:

> Thanks Bob, I hope I can return the favor someday.
>
I like this group, we all help each other. Do a favor for the next one
that needs one - might even be me :-)

73,

Bob Patten, N4BP
Plantation, FL
n4bp@shadow.net

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Dan Hogan <dhhogan@lightside.com>
Subject: [11803] Re: RS 1/8 inch plug warning
Message-ID: <3.0.16.19970212091423.26871424@mail.lightside.com>

Conrad:

My parts purchases at RS are now minimal because of this. Also I have run
into several miss-labeled items. I bit the bullet and went Mail/Email
Order. And DON'T buy their pre-fab'ed cable assemblies.

At 09:41 2/12/97 -0600, Conard Murray Wrote

[Snip]

>The only possibility was a shorted plug and sure enough, both plugs in the
>blister pack are dead shorted.

>I don't need this sort of excitement! I wonder how many of the other plugs

>RS has on the shelf are that way?

>Guess it pays to check ALL components before using them!

[Snip]

72/73

Dan Hogan WA6PBY QRP-L #558, CQC #340, NorCal #1806,
dhhogan@lightside.com ARRL, ARCI #3847, G-QRP #9533
Lat. 34d 03.5'N Lon. 117d 56.0'W Grid: OM84wc

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: johnmars@mindspring.com (John Marshall)
Subject: [11796] Re: RS 100k Pots
Message-ID: <v01540b02af27aad11de1@[207.69.246.55]>

On Mon, 10 Feb 1997 launerb@crl.com (William H. Launer) wrote:

>The bottom end (about 30 degrees) of the 100k "linear" pot I got from
>Radio Shack didn't seem to have any effect on the 38s tuning. Today,
>I unsoldered the ground wire, and did some ohmmeter tests. The pot is
>far from being "linear" - the resistance between the wiper and the end
>of the pot remains nearly 0 ohms over that 30 degree segment. I guess
>the moral of the story is to spend a little more and get quality pots
>for critical applications! Other than getting the tuning range set,
>the rig works great!

Yup. These RS pots allow you to remove the rear housing and replace it with a SPST switch assembly. The wiper arm uses that 30 degree segment to actuate the switch. Thus the "dead zone" on the pot is dead for a reason. This isn't really a quality issue, but it's a nasty surprise for this application and the price we pay for being able to get the pot avec or sans switch!

72, John KU4AF

John Marshall - Pittsboro, NC - FM05ks

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Ken Lopez <kjlopez@earthlink.net>
Subject: [11745] Re: The "T" Beacon :-)
Message-ID: <33016561.2CE@earthlink.net>

Speaking of new "Beacons", I have heard a "K" beacon on 7.039 this week, around dawn, wc time. It was on top of the "F" beacon, and audible at almost the same signal strength. Any ideas?

Ken, N6TZV

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Joe Gervais <vole@primenet.com>
Subject: [11784] Re: Tuesday FSFD Special Guests
Message-ID: <199702121628.JAA23953@usr03.primenet.com>

Bob (KI7MN) wrote:

> I did, however, along with Joe AB7TT, Floyd NQ7X, Mike NQ7K, Dan KK7BD and
> Brian W5VB0, have a chance to meet with Randy WJ4P and see his
> 'championship' Forty-niner, along with some other goodies he had.

Very good time indeed! Randy's done some neat stuff with his OHR-400, and also had a little Whiterook paddle with a keyer and a piezobuzzer built right in. Sweet! Tried my darndest to walk away with it, but no luck....

Ate and yacked the whole night. Great fun! Think the only topic we didn't cover was comparing the merits of Babylon 5 vs. Deep Space 9 (to which I have only one thing to say - Dax :-)). And with Randy having supplied the spicy chicken wings, it just couldn't have gotten much better. His co-worker was even pleasantly putting up with a table full of QRPers. :-)

After we grudgingly called it a night, Floyd, Brian and I were car-pooling home and I found myself in a quandry. I'd made a sked with a new local ham on 40m, and I clearly wasn't going to make it home in time. Felt terrible, since this was his first sked ever. So Floyd fired up his TT Scout and worked the sked for me while we were mobile, and I picked up after we got to my house.

Ya know, this really **is** the best hobby in the world, ain't it?

Thanks for coming, Randy! Nice to meet ya!

Cheers de AB7TT (ex-KC7NEV),

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: "Harvey D. D. Hetland" <n6mm@idt.net>
Subject: [11757] Re: V5/ZS6YG,
Message-ID: <3301DBBD.3E36@mail.idt.net>

Thanks Scott and congratulations to you on getting him too. I had just gotten home from work, and I tuned in V5/ZS6YG just as he was saying, "One or two more and QRT to work on the antenna ...". Boy did I feel fortunate that he picked up the mm suffix! I was running 5 watts and a 2 element beam. Thanks for the QSL information too. For other QRPers interested in DXing the operator, Glen, said he would be active through the weekend before he pulled the plug to work on the antenna. The frequency was 7027 kHz QSX up 1 kHz. Good hunting.

73, Harvey, N6MM.

Scott Bauer, W3CV, wrote:

>
> Talk about lucky!!!! Worked V5/ZS6YG at 0531 with 3 watts this
> morning. I also heard Harvey/ N6MM work him around 0650 or so.
> Good catch Harvey :-) QSL mgr is KY0A

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: okasb@rex.mtv.gtegsc.com (Bob Okas)
Subject: [11723] Re: Voltage regulation principles
Message-ID: <9702120010.AA24473@rex.mtv.gtegsc.com>

Hi Gang,

Marty Watt wrote:

> > I'd like to learn a bit about voltage regulator circuits, by
> > modifying my CMOS SuperKeyer II. Yet, I don't want to fry it!
> >
> > Currently, it runs on 3 AA 1.5 V batteries. I'd suppose that places
> > the actual voltage requirements around 3-4.5 VDC.
> >
> > Can I put a 5V regulator in line and run it off of a 9V source?
> > What else would I need to make this work?

Dana, K6JQ wrote:

> Well, you *can* use a regulator like a 78L05, but the regulator
> draws quite a bit of current by itself and will run the 9V battery
> down pretty quickly.

> If you need a really compact battery, try using three AAA cells in
> series. Taped together they take up about the same space as a 9V
> battery.

I say:

For the minimum space, why not try two 3V lithium coin cells in series? Add a small diode in series to get the voltage within the 'HC705's range. You should experience long battery life, assuming you don't use the sidetone. Follow the general precautions with lithium cells: They have no sense of humor when it comes to shorts and tend to explode.

Bob - W3CD

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: [11760] Re: Voltage regulation principles
Message-ID: <dohGPBAzNXAzEwkP@lfheller.demon.co.uk>

In message <Roam.3.0.1.855705171.4515.myers@bigboy>, "Dana H. Myers" <myers@bigboy.West.Sun.COM> writes

>Marty Watt wrote:

>

>> I'd like to learn a bit about voltage regulator circuits, by
>> modifying my CMOS SuperKeyer II. Yet, I don't want to fry it!

>>

>> Currently, it runs on 3 AA 1.5 V batteries. I'd suppose that places
>> the actual voltage requirements around 3-4.5 VDC.

>>

>> Can I put a 5V regulator in line and run it off of a 9V source?
>> What else would I need to make this work?

>

>Well, you *can* use a regulator like a 78L05, but the regulator
>draws quite a bit of current by itself and will run the 9V battery
>down pretty quickly.

>

>If you need a really compact battery, try using three AAA cells in
>series. Taped together they take up about the same space as a 9V
>battery.

>

>The 68HC705 (that the SK II is based on) is rated for operation from
>3.0V to 5.5V.

A single AA lithium battery will give 3.6 V. Another solution is to use a chip made by Maxim (can't remember the number) that gives a higher voltage from a 1.5 V cell. It's a very efficient device, as I recall.

73, Leon

--

Leon Heller, G1HSM

leon@lfheller.demon.co.uk

Tel: +44 (0) 118 947 1424 (home)

+44 (0) 1344 385556 (work)

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: "Bradley S. Mitchell" <bmitchel@kodak.com>

Subject: [11775] Re: Voltage regulation principles

Message-ID: <3302AF01.1F87@kodak.com>

Also, there is an Excellent Discussion on voltage regulators for dropout, biasing current etc in QRP Power. The 78L05 is certainly well known, but there are better parts out there now.

This was in the article regarding the SW-40 transceiver, and how to improve things.

Lau, Zack, W1VT wrote:

>

> You can buy micropower regulators designed for powering

> 5 volt ICs off 9V batteries for very long periods of time. Check

>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997

From: mdwatt@usit.net (Marty Watt)

Subject: [11788] Re: Voltage regulation principles

Message-ID: <3301e4fe.57151328@pop.usit.net>

On Wed, 12 Feb 1997 09:51:00 -0500, "Lau, Zack, W1VT"

<zlau@arrl.org> wrote:

Many thanks to Zack and the others who responded to my query about voltage regulation. Even though I'm an extra class (8 yrs!), I've never really gotten into building, and voltage regulation appeared to be a good way to begin learning.

The summary is: Don't mess with the CMOS II -- It's too nice a piece of equipment to mess with, particularly on experimentation. Stick to the 5v power source, per the instructions. That's the consensus, anyway.

>
>You can buy micropower regulators designed for powering
>5 volt ICs off 9V batteries for very long periods of time. Check
>the latest Maxim and National Semiconductor catalogs
>for the best products--what I used is probably obsolete
>by now. Oh yeah, don't forget to investigate the required
>bypass capacitors--often they aren't optional.-- Zack Lau W1VT
>
>

As to this insight from Zack, is there anyplace on-line where these devices can be investigated? I don't have access to the mentioned catalogs, nor a place to put them if I did have them. What characteristics should I look for? low mA draw but high mA tolerance? VDC range?

Thanks again!

72 es 73 de=20
Marty, KN4BH

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
ARRL VE - QRP ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid Sq EM55oq
~~~~~

From owner-qrp-l@Lehigh.EDU Wed Feb 12 18:17:21 1997  
From: "Lau, Zack, W1VT" <zlau@arrl.org>  
Subject: [11800] RE: Voltage regulation principles  
Message-ID: <m0vuk0A-0004rCC@mgate.arrl.org>

<http://altavista.digital.com/>

is a great place to search for web pages

<http://www.maxim-ic.com/>

<http://www.linear-tech.com/#Introduction>

are some WWW pages to try--Zack W1VT



From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997  
From: "Swanson, Glenn, KB1GW" <gswanson@arrl.org>  
Subject: [11809] Re: Voltage regulation principles  
Message-ID: <m0vullr-0004rGC@mgate.arrl.org>

Greetings,

Like the 38 Special(?), my NN1G SW-40 uses a NE5532 op amp.  
With that in mind, here's another gem from KB6FPW and AE6C  
as quoted from the book "QRP Power:"

<snip>

KB6FPW: "5 to 8 mA of the 22 [the SW-40 draws in receive] are wasted away  
warming the NE5532 (a JRC device was supplied as a substitution in the  
kit)."

"AE6C: You don't have to use the current-hungry op amp in the kit. The dual  
pinout is an industry standard and many newer products will give you  
equivalent or better performance for far less current. I chose an LMC662  
(Dig-Key #LMC662CN-ND; price \$2.28) which is a CMOS part that can be  
literally drive rail to rail at the output. Its CMOS inputs do not generate  
current noise that manifests as voltage noise across the large input  
resistors [in the SW-40]. Supply current consumption is only 750  
microamperes vs many milliamperes for the older bipolar NE5532. Do not use  
just any CMOS op amp here as most have feeble output stages that are not  
able to drive headphones."

Good stuff. They (KB6FPW and AE6C) go on for page after page  
like this. Great reading. I'd recommend the book to anyone interested  
in the subject of homebrewing QRP gear. (And NOT because of  
where I work.) I'm learning right along with the rest of the gang here  
and I thought I'd contribute a little something (even if it is just a  
quotation from a book.) :- See you on 40 from CT with 1.5 W :-)  
(er, make that when I get my TiCK-1 keyer in the mail--and installed.)

73, Glenn, KB1GW

-----  
>From: bmitchel  
>From: "Bradley S. Mitchell" <bmitchel@kodak.com>  
>-----  
>Also, there is an Excellent Discussion on voltage regulators  
>for dropout, biasing current etc in QRP Power. The 78L05 is

>certainly well known, but there are better parts out there now.  
>  
>This was in the article regarding the SW-40 transceiver, and  
>how to improve things.  
>  
>Lau, Zack, W1VT wrote:  
>>  
>> You can buy micropower regulators designed for powering  
>> 5 volt ICs off 9V batteries for very long periods of time.  
>>

From owner-qrp-1@Lehigh.EDU Wed Feb 12 18:17:21 1997  
From: Philip Karras <ke3fl@access.digex.net>  
Subject: [11812] Re: Where can I look up callsigns?  
Message-ID: <Pine.SUN.3.94.970212154317.10070A-100000@access5.digex.net>

I use (for USA):

telnet  
open callsign.ualr.edu 2000  
(telnet & open are commands I have to use in my internet provider)

For DX I use:

lynx www.buck.com/cgi-bin/do\_hamcall  
(lynx is the command I have to use in my internet provider)

72 & 73 de KE3FL/Phil  
:-)